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=> d his

     (FILE 'HOME' ENTERED AT 15:53:05 ON 05 AUG 2001)

     FILE 'HCAPLUS' ENTERED AT 15:53:30 ON 05 AUG 2001
L1          2737 S UENO K?/AU
L2          1667 S SASAKI A?/AU
L3           879 S KAWANO K?/AU
L4          1166 S OKABE T?/AU
L5            96 S KITAZAWA N?/AU
L6         14232 S TAKAHASHI K?/AU
L7             0 S YAMAOTO N?/AU
L8         12859 S SUZUKI Y?/AU
L9           660 S MATSUNAGA M?/AU
L10          392 S KUBOTA A?/AU
L11        34556 S L1-10
L12            1 S L11 AND CONDENSED PYRIDINE
L13          309 S L11 AND PYRIDINE
L14           57 S L11 AND PYRIDINE/TI
L15           13 S L14 AND PATENT/DT
                 SELECT RN L15 1

     FILE 'REGISTRY' ENTERED AT 15:58:48 ON 05 AUG 2001
L16           38 S E1-38

     FILE 'HCAPLUS' ENTERED AT 15:59:10 ON 05 AUG 2001
L17            1 S L15 AND L16
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L19           50 S L18
L20         1960 S L18 FUL
                 SAVE L20 PAT850P/A
L21              STR L18
L22           50 S L21 SSS SAM SUB=L20
L23          826 S L21 SSS FUL SUB=L20
                 SAVE L23 PAT850S1/A
L24           15 S L16 AND L23

     FILE 'HCAPLUS' ENTERED AT 16:12:54 ON 05 AUG 2001
L25            2 S L24
L26            1 S L25 NOT L17
L27           44 S L23
L28           42 S L27 NOT L25
L29           40 S L28 AND PY<1999
L30           35 S L29 AND PY<1998
L31            7 S L28 NOT L30
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- inventn search

1 cites w/ 38 compounds displayed

parent search

826 cpds in subset search

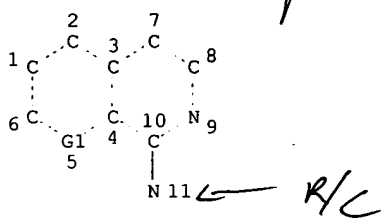
15 cpds from L23 are in appl. work (L17)

1 cite w/ appl. compounds

35 cites w/ PY<1998

← 1 cite is a patent with an earlier priority date

=> d que l27
L18 STR parent search



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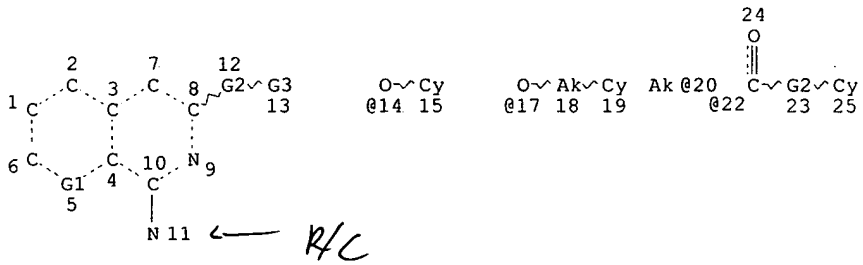
NSPEC IS RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L20 1960 SEA FILE=REGISTRY SSS FUL L18
L21 STR Subset search



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REP G2=(0-6) CH2
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CONNECT IS E1 RC AT 20
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GGCAT IS LIN AT 18
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE
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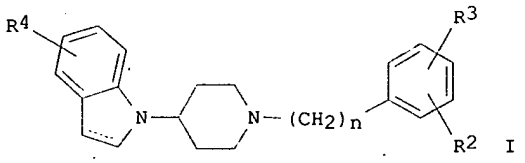
L27 44 SEA FILE=HCAPLUS ABB=ON PLU=ON L23

=> d bib abs hitstr

L17 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:277851 HCAPLUS
DN 132:313677
TI Analgesics containing 1-(1-phenethylpiperidin-4-yl)indole, 1-(piperazin-1-yl)-3-phenylisoquinoline, or 4-(piperazin-1-yl)-6-phenylthieno[3,2-c]**pyridine** derivatives
IN **Ueno, Kohshi; Sasaki, Atsushi; Kitazawa, Noritaka; Kawano, Koki; Okabe, Tadashi; Takahashi, Keiko; Matsunaga, Manabu**; Shinoda, Yukie
PA Eisai Co., Ltd., Japan
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023075	A1	20000427	WO 1999-JP5761	19991019
	W: CA, CN, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 2000191533	A2	20000711	JP 1999-296106	19991019
PRAI	JP 1998-296681	A	19981019		

OS MARPAT 132:313677
GI



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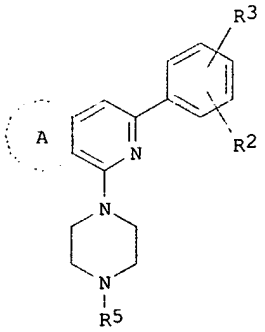

II

AB Novel analgesics for various diseases such as headache and migraine and pain and ache in assocn. with trauma, phys. compression, etc. are described. These analgesics, which are useful for the prevention, treatment, or improvement of pains in humans, contain as the active ingredient benzene derivs. represented by general formula (I or II) or pharmacol. acceptable salts thereof (wherein R2, R3 = H, halo, lower alkyl, lower alkoxy, cyano, lower hydroxyalkyl, lower hydroxyalkoxy, N-lower alkylamino, lower alkylsulfonylaminoalkyl; R4 = lower acylaminoalkyl, amido-lower alkyl, N-lower alkylamino-alkyl; n = 0, 1-3; R5 = lower alkyl, hydroxy-lower alkyl; the ring A represents a benzene or thiophene ring). I and II s.c. showed analgesic activity equal to or greater than that of morphine hydrochloride in acetic acid-induced

writhing assay in mice. They were also tested for the binding activity to serotonin (5HT) receptor as well as muscle relaxant activity.

IT **214611-53-7 214613-26-0 214613-27-1**
214613-33-9 214613-49-7 214613-83-9
214613-84-0 214613-89-5 214613-90-8
214618-14-1 223540-38-3 223540-56-5
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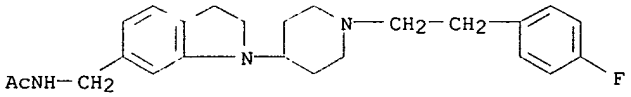
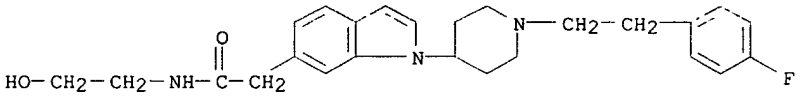
223546-95-0 223547-08-8 223547-11-3
223547-20-4 223547-21-5 223547-40-8
223547-42-0 223551-27-7 223551-30-2
223557-26-4 265667-20-7 265667-21-8
265667-22-9 265667-23-0 265667-24-1
265667-25-2 265667-26-3 265667-27-4
265667-28-5 265667-35-4
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(analgesics contg. 1-(1-phenethylpiperidin-4-yl)indole, 1-(piperazin-1-yl)-3-phenylisoquinoline, or 4-(piperazin-1-yl)-6-phenylthieno[3,2-c]pyridine derivs.)

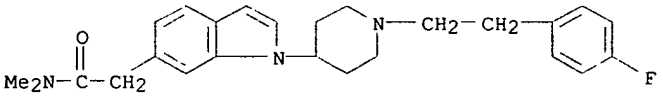
RN 214611-53-7 HCAPLUS
CN Acetamide, N-[[1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-2,3-dihydro-1H-indol-6-yl]methyl]- (9CI) (CA INDEX NAME)



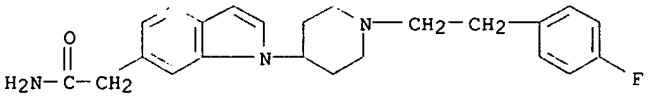
RN 214613-26-0 HCAPLUS
CN 1H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



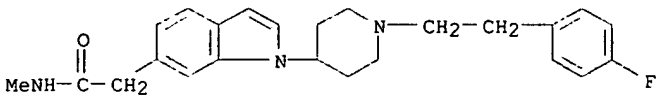
RN 214613-27-1 HCAPLUS
CN 1H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



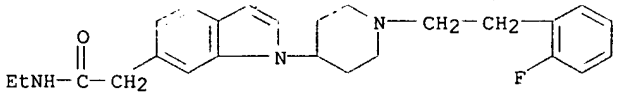
RN 214613-33-9 HCAPLUS
CN 1H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



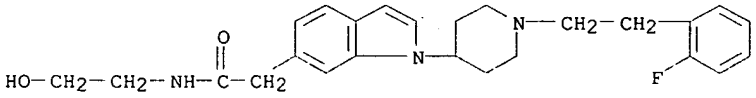
RN 214613-49-7 HCAPLUS
CN 1H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-N-methyl- (9CI) (CA INDEX NAME)



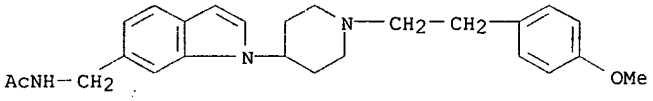
RN 214613-83-9 HCAPLUS
CN 1H-Indole-6-acetamide, N-ethyl-1-[1-[2-(2-fluorophenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



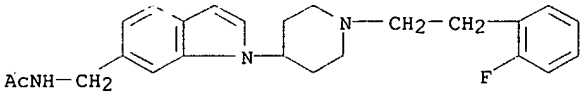
RN 214613-84-0 HCAPLUS
CN 1H-Indole-6-acetamide, 1-[1-[2-(2-fluorophenyl)ethyl]-4-piperidinyl]-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 214613-89-5 HCAPLUS
CN Acetamide, N-[[1-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]-1H-indol-6-yl]methyl]- (9CI) (CA INDEX NAME)



RN 214613-90-8 HCAPLUS
CN Acetamide, N-[[1-[1-[2-(2-fluorophenyl)ethyl]-4-piperidinyl]-1H-indol-6-yl]methyl]- (9CI) (CA INDEX NAME)



RN 214618-14-1 HCAPLUS
CN 1H-Indole-6-acetamide, 1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-N,N-dimethyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 214613-27-1
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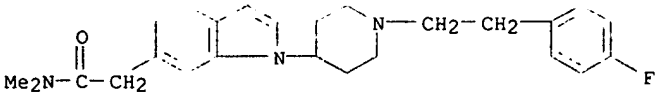
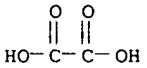
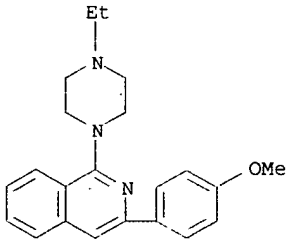


CM 2

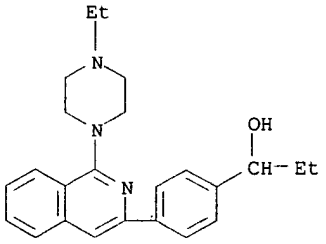
CRN 144-62-7
CMF C2 H2 O4



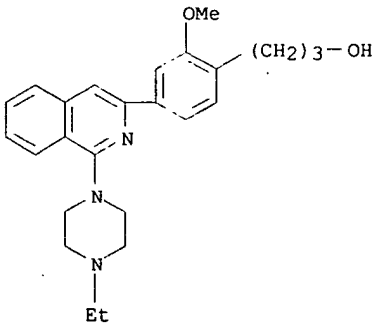
RN 223540-38-3 HCAPLUS
CN Isoquinoline, 1-(4-ethyl-1-piperazinyl)-3-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



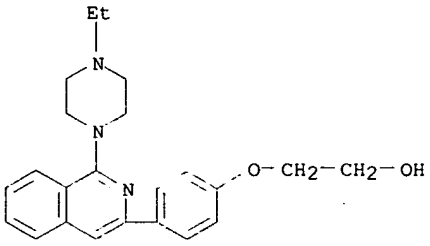
RN 223540-56-5 HCAPLUS
CN Benzenemethanol, .alpha.-ethyl-4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]- (9CI) (CA INDEX NAME)



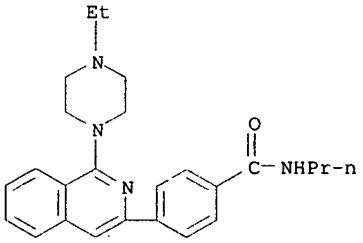
RN 223540-84-9 HCAPLUS
CN Benzenepropanol, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-methoxy- (9CI) (CA INDEX NAME)



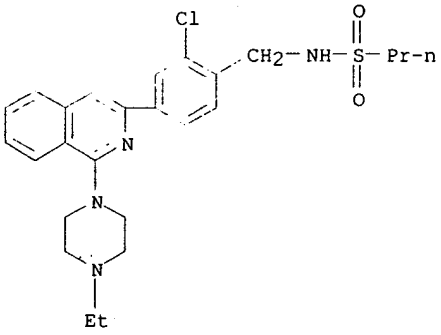
RN 223540-90-7 HCAPLUS
CN Ethanol, 2-[4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]phenoxy]- (9CI) (CA INDEX NAME)



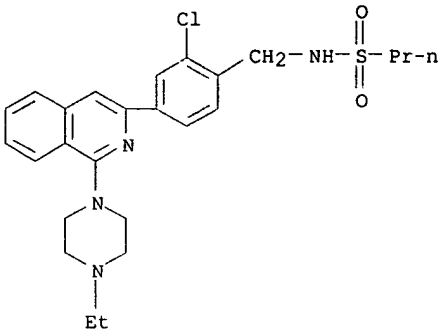
RN 223541-70-6 HCAPLUS
CN Benzamide, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-N-propyl- (9CI) (CA INDEX NAME)



RN 223542-28-7 HCAPLUS
CN 1-Propanesulfonamide, N-[[2-chloro-4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

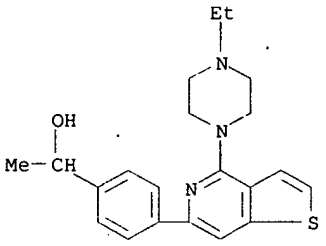


RN 223542-29-8 HCAPLUS
CN 1-Propanesulfonamide, N-[[2-chloro-4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]phenyl]methyl]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 223546-94-9 HCAPLUS
CN Benzenemethanol, 4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]-.alpha.-methyl- (9CI) (CA INDEX NAME)



RN 223546-95-0 HCAPLUS
CN Benzenemethanol, 4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]-.alpha.-methyl-, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

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CRN 223546-94-9
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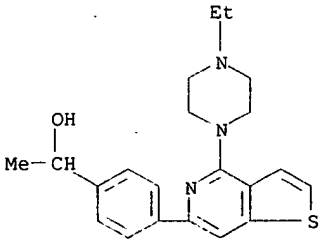
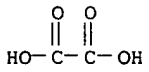
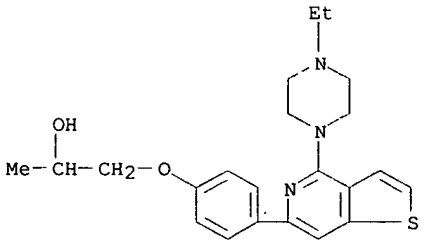


CM 2

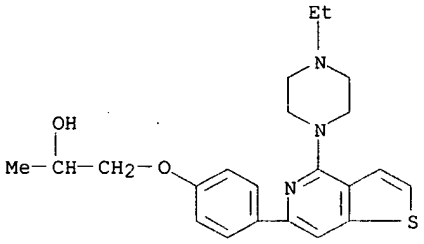
CRN 144-62-7
CMF C2 H2 O4



RN 223547-08-8 HCAPLUS
CN 2-Propanol, 1-[4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]phenoxy]- (9CI) (CA INDEX NAME)

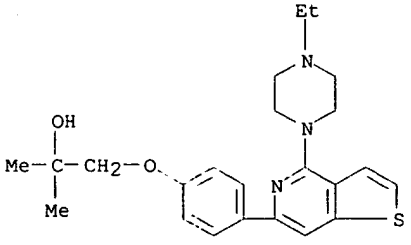


RN 223547-11-3 HCAPLUS
CN 2-Propanol, 1-[4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]phenoxy]-, dihydrochloride (9CI) (CA INDEX NAME)

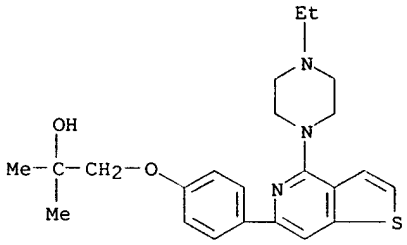


●2 HCl

RN 223547-20-4 HCAPLUS
CN 2-Propanol, 1-[4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]phenoxy]-2-methyl- (9CI) (CA INDEX NAME)

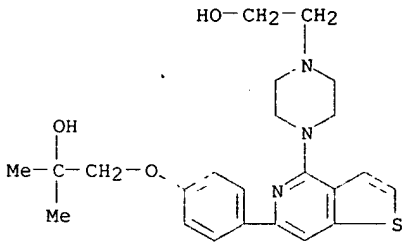


RN 223547-21-5 HCAPLUS
CN 2-Propanol, 1-[4-[4-(4-ethyl-1-piperazinyl)thieno[3,2-c]pyridin-6-yl]phenoxy]-2-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

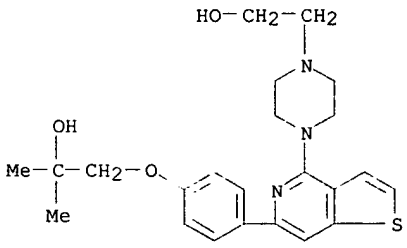


●2 HCl

RN 223547-40-8 HCAPLUS
CN 1-Piperazineethanol, 4-[6-[4-(2-hydroxy-2-methylpropoxy)phenyl]thieno[3,2-c]pyridin-4-yl]- (9CI) (CA INDEX NAME)

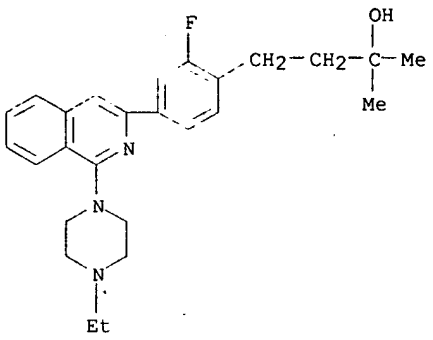


RN 223547-42-0 HCAPLUS
CN 1-Piperazineethanol, 4-[6-[4-(2-hydroxy-2-methylpropoxy)phenyl]thieno[3,2-c]pyridin-4-yl]-, dihydrochloride (9CI) (CA INDEX NAME)

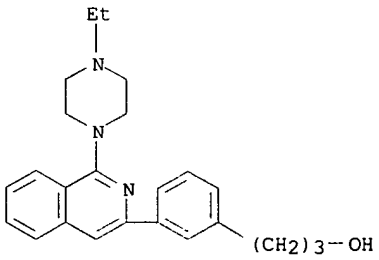


●2 HCl

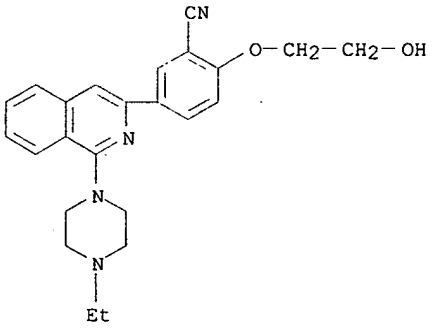
RN 223551-27-7 HCAPLUS
CN Benzenepropanol, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-fluoro-.alpha.,.alpha.-dimethyl- (9CI) (CA INDEX NAME)



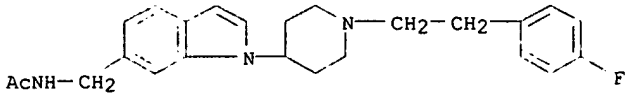
RN 223551-30-2 HCAPLUS
CN Benzenepropanol, 3-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]- (9CI) (CA INDEX NAME)



RN 223557-26-4 HCAPLUS
CN Benzonitrile, 5-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-(2-hydroxyethoxy)- (9CI) (CA INDEX NAME)

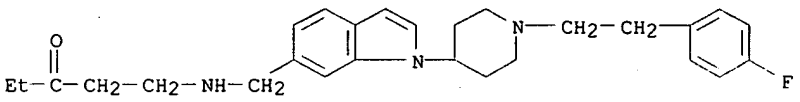


RN 265667-20-7 HCAPLUS
CN Acetamide, N-[[1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-1H-indol-6-yl]methyl]- (9CI) (CA INDEX NAME)

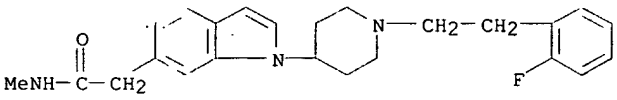


RN 265667-21-8 HCAPLUS

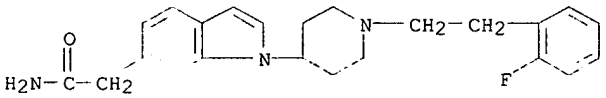
CN 3-Pentanone, 1-[[[1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]-1H-indol-6-yl]methyl]amino]- (9CI) (CA INDEX NAME)



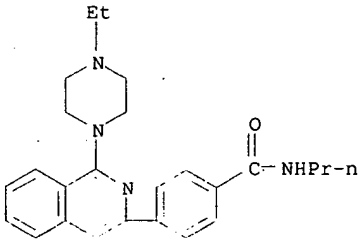
RN 265667-22-9 HCAPLUS
CN 1H-Indole-6-acetamide, 1-[1-[2-(2-fluorophenyl)ethyl]-4-piperidinyl]-N-methyl- (9CI) (CA INDEX NAME)



RN 265667-23-0 HCAPLUS
CN 1H-Indole-6-acetamide, 1-[1-[2-(2-fluorophenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

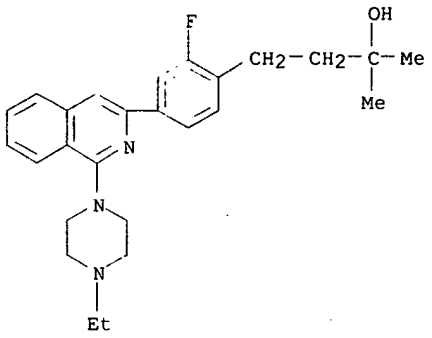


RN 265667-24-1 HCAPLUS
CN Benzamide, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-N-propyl-, monohydrochloride (9CI) (CA INDEX NAME)



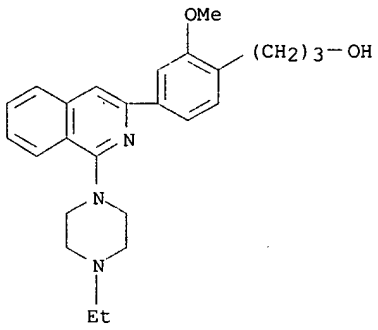
● HCl

RN 265667-25-2 HCAPLUS
CN Benzenepropanol, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-fluoro-.alpha.,.alpha.-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)



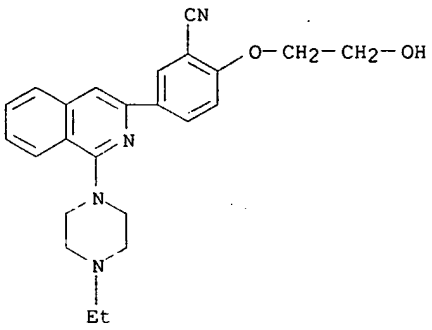
● HCl

RN 265667-26-3 HCAPLUS
CN Benzenepropanol, 4-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-methoxy-, monohydrochloride (9CI) (CA INDEX NAME)



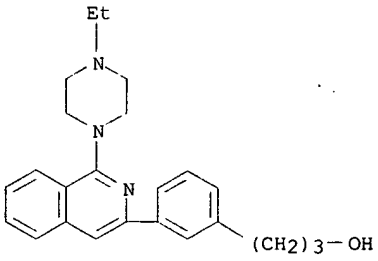
● HCl

RN 265667-27-4 HCAPLUS
CN Benzonitrile, 5-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-2-(2-hydroxyethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)



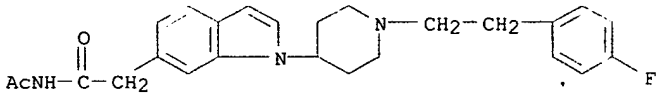
● HCl

RN 265667-28-5 HCAPLUS
CN Benzenepropanol, 3-[1-(4-ethyl-1-piperazinyl)-3-isoquinolinyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 265667-35-4 HCAPLUS
CN 1H-Indole-6-acetamide, N-acetyl-1-[1-[2-(4-fluorophenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



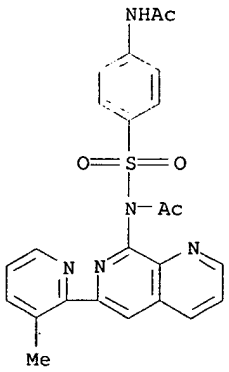
RE.CNT 4
RE
(1) Eisai Co Ltd; WO 9843956 A1 1998 HCAPLUS
(2) Eisai Co Ltd; WO 9918077 A1 1999 HCAPLUS
(3) Meiji Seika Kaisha Ltd; US 5631257 A 1997 HCAPLUS
(4) Rhone-Poulenc Rorer S A; US 5563144 A 1996 HCAPLUS

=> d bib abs hitstr 2

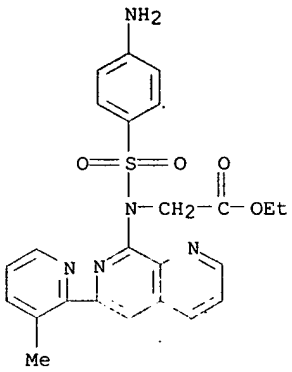
L31 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:521437 HCAPLUS
DN 131:157754
TI Preparation of naphthyridine IL-4 antagonists and G-CSF stimulators
IN Solomon, Daniel M.; Grace, Michael J.; Fine, Jay S.; Bober, Loretta A.; Sherlock, Margaret H.
PA Schering Corporation, USA
SO U.S., 57 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5939431	A	19990817	US 1997-878860	19970619
PRAI US 1996-22173		19960620		

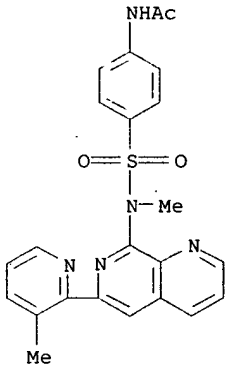
OS MARPAT 131:157754
AB Title compds., e.g., R1Z1NHSO2Z(NH)a(CO)bR8 (R1 = 3-methyl-2-pyridinyl; Z1 = 1,7-naphthyridine-6,8-diyl)[I; R8 = alkyl(oxy) or benzyl(oxy); Z = phenylene; a,b = 0 or 1] were prepd. as IL-4 antagonists (no data) and G-CSF stimulators. Thus, 8-amino-6-(3-methyl-2-pyridinyl)-1,7-naphthyridine was amidated by 4-(AcHN)C6H4SO2Cl to give I (R8 = Me, Z = 1,4-phenylene, a = b = 1). Data for G-CSF stimulating activity of I were given.
IT **200927-49-7P 200927-65-7P 200927-80-6P**
200928-20-7P 200928-22-9P 200928-24-1P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of naphthyridine IL-4 antagonists and G-CSF stimulators)
RN 200927-49-7 HCAPLUS
CN Acetamide, N-[[4-(acetylamino)phenyl]sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]- (9CI) (CA INDEX NAME)



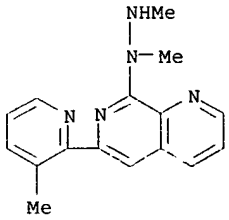
RN 200927-65-7 HCAPLUS
CN Glycine, N-[(4-aminophenyl)sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]-, ethyl ester (9CI) (CA INDEX NAME)



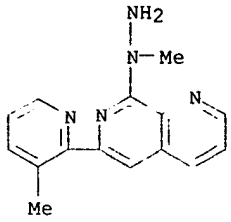
RN 200927-80-6 HCAPLUS
CN Acetamide, N-[4-[[methyl[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



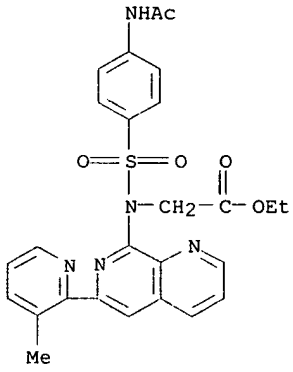
RN 200928-20-7 HCAPLUS
CN 1,7-Naphthyridine, 8-(1,2-dimethylhydrazino)-6-(3-methyl-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 200928-22-9 HCAPLUS
CN 1,7-Naphthyridine, 8-(1-methylhydrazino)-6-(3-methyl-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 200928-24-1 HCAPLUS
CN Glycine, N-[[4-(acetylamino)phenyl]sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]-, ethyl ester (9CI) (CA INDEX NAME)



RE.CNT 12
RE
(2) Anon; GB 1545767 1979 HCAPLUS
(5) Behrens; US 4942163 1990 HCAPLUS
(6) De Zwart; J Med Chem 1988, V31, P716 HCAPLUS
(7) De Zwart; J Med Chem 1989, V32, P487 HCAPLUS
(8) Demetri; Blood 1991, V78, P2791 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l30 1-35

L30 ANSWER 1 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:25142 HCAPLUS
DN 128:88786
TI Preparation of naphthyridines which affect IL-4 and G-CSF
IN Solomon, Daniel M.; Grace, Michael J.; Fine, Jay S.; Bober, Loretta A.; Sherlock, Margaret H.
PA Schering Corp., USA
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9748368	A2	19971224	WO 1997-US9202	19970618	<--
	WO 9748368	A3	19980205			
	W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
	CA 2258752	AA	19971224	CA 1997-2258752	19970618	<--
	AU 9735673	A1	19980107	AU 1997-35673	19970618	<--
	EP 912571	A2	19990506	EP 1997-932142	19970618	
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, LT, LV, FI, RO					
	CN 1228090	A	19990908	CN 1997-197310	19970618	
PRAI	US 1996-669185		19960620			
	WO 1997-US9202		19970618			

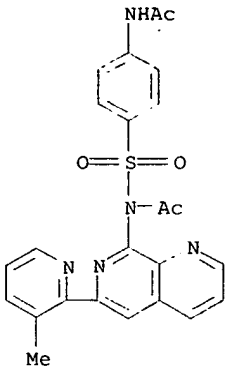
OS MARPAT 128:88786
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

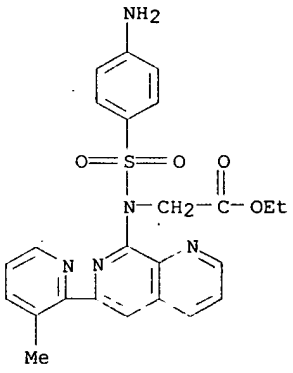
AB The title compds. [I; E = II, III, etc.; A = CH, S, N, N(O); L, M, X, Z, W, T, U, V = CH, N, N(O); Y = H, Me; Y1 = H, lower alkyl, Ph, etc.; Q = H, lower alkyl, lower alkyl O(O)CCH2, lower alkyl (O)C; a, b, c, g, h, j = 0-1; f = 1-2; n = 1-6; tt = 0-1; R8 = H, OH, halo, etc.] and their pharmaceutically acceptable salts, useful in the treatment of allergy, inflammation, autoimmune diseases, B-cell lymphomas, tumors, and the after effects of bone marrow transplantation, were prepd. Thus, reaction of 8-amino-6-(3-methyl-2-pyridyl)-1,7-naphthyridine with N-acetylsulfanilyl chloride in the presence of Et3N and DMAP in CH2Cl2 afforded the title compd. IV which resulted in a 4-5-fold increase in G-CSF levels, with an EC50 of 15 .mu.M.

IT **200927-49-7P 200927-65-7P 200927-80-6P**
200928-20-7P 200928-22-9P 200928-24-1P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of naphthyridines which affect IL-4 and G-CSF)

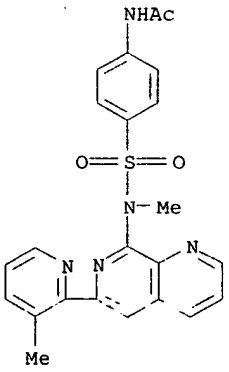
RN 200927-49-7 HCAPLUS
CN Acetamide, N-[[4-(acetylamino)phenyl]sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]- (9CI) (CA INDEX NAME)



RN 200927-65-7 HCAPLUS
CN Glycine, N-[(4-aminophenyl)sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 200927-80-6 HCAPLUS
CN Acetamide, N-[4-[[methyl[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

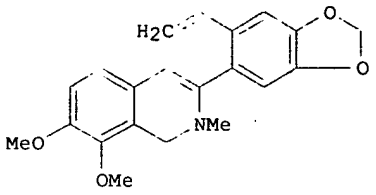


RN 200928-20-7 HCAPLUS
CN 1,7-Naphthyridine, 8-(1,2-dimethylhydrazino)-6-(3-methyl-2-pyridinyl)- (9CI) (CA INDEX NAME)

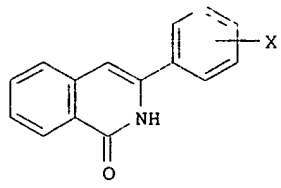
Me

L30 ANSWER 2 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:498744 HCAPLUS
DN 127:190707
TI Synthesis and antitumor activity of 3-arylisoquinoline derivatives
AU Cho, Won-Jea; Yoo, Su-Jeong; Park, Myun-Ji; Chung, Byung-Ho; Lee, Chong-Ock
CS College of Pharmacy, Chonnam National University, Kwangju, 500-757, S. Korea
SO Arch. Pharmacal Res. (1997), 20(3), 264-268
CODEN: APHRDQ; ISSN: 0253-6269
PB Pharmaceutical Society of Korea
DT Journal
LA English
GI

SEARCHED BY SUSAN HANLEY Phone: 305-4053



II



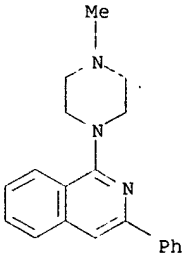
III

AB In order to study the structure-activity relationship of 7,8-dimethoxy-2-methyl-3-(4,5-methylenedioxy-2-vinylphenyl)isoquinoline-1(2H)-one (I), which has exhibited significant antitumor activity, chem. modifications of I were performed to yield the corresponding products, e.g., isoquinoline II. Further systematic uses of an efficient procedure for the synthesis of 3-arylisoquinoline derivs. produced the substituted compds. III (X = H, 4-Br, 4-MeO, 4-Cl, 2-, 3-, 4-Me), which were tested for in vitro antitumor activity against five different human cancer cell lines.

IT **194292-31-4P 194292-32-5P 194292-33-6P**
194292-34-7P 194292-35-8P 194292-36-9P
194292-37-0P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and antitumor activity of arylisoquinoline derivs.)

RN 194292-31-4 HCAPLUS

CN Isoquinoline, 1-(4-methyl-1-piperazinyl)-3-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

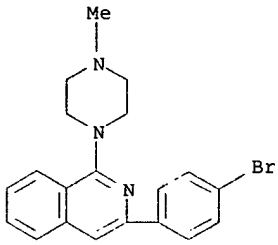


10~

● HCl

RN 194292-32-5 HCAPLUS

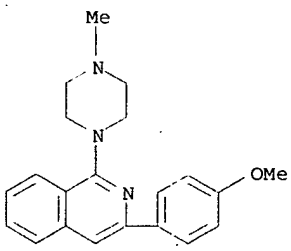
CN Isoquinoline, 3-(4-bromophenyl)-1-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



102

● HCl

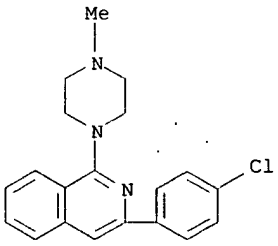
RN 194292-33-6 HCAPLUS
CN Isoquinoline, 3-(4-methoxyphenyl)-1-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



102

● HCl

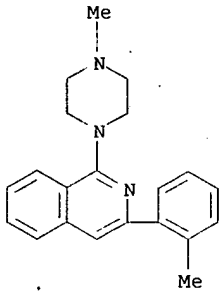
RN 194292-34-7 HCAPLUS
CN Isoquinoline, 3-(4-chlorophenyl)-1-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



102

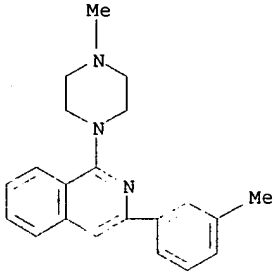
● HCl

RN 194292-35-8 HCAPLUS
CN Isoquinoline, 3-(2-methylphenyl)-1-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



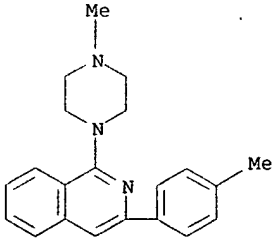
● HCl

RN 194292-36-9 HCAPLUS
CN Isoquinoline, 3-(3-methylphenyl)-1-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

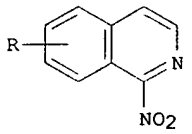
RN 194292-37-0 HCAPLUS
CN Isoquinoline, 3-(4-methylphenyl)-1-(4-methyl-1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

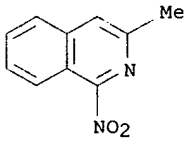
L30 ANSWER 3 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:504767 HCAPLUS
DN 125:275604

TI DMSO-Ac2O promoted nitration of isoquinolines. One-step synthesis of 1-nitroisoquinolines under mild conditions
AU Baik, Woonphil; Yun, Sangmin; Rhee, Jong Uk; Russell, Glen A.
CS Dep. Chemistry, Myong Ji Univ., Kyung Ki Do, 449-728, S. Korea
SO J. Chem. Soc., Perkin Trans. 1 (**1996**), (15), 1777-1779
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English
OS CASREACT 125:275604
GI



I

AB Nitroisoquinolines I (R = H, 5-NO2, 4-Br, 3-Me, 5-Me) were directly prepd. from the corresponding isoquinolines with potassium nitrite and acetic anhydride in DMSO in good yields.
IT **182184-82-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(nitration of isoquinolines promoted by potassium nitrite/DMSO/acetic anhydride)
RN 182184-82-3 HCAPLUS
CN Isoquinoline, 3-methyl-1-nitro- (9CI) (CA INDEX NAME)



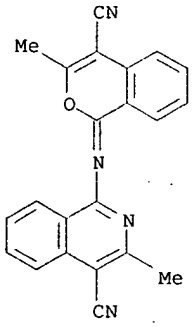
L30 ANSWER 4 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:451066 HCAPLUS
DN 125:161858
TI Selective inhibition of cyclic AMP-dependent protein kinase by isoquinoline derivatives
AU Lu, Zhe Xiong; Quazi, Nurul Huda; Deady, Leslie W.; Polya, Gideon M.
CS Sch. Biochem., La Trobe Univ., Victoria, 3083, Australia
SO Biol. Chem. Hoppe-Seyler (**1996**), 377(6), 373-384
CODEN: BCHSEI; ISSN: 0177-3593
DT Journal
LA English
AB A large series of isoquinoline derivs. was synthesized including derivs. of isoquinoline, isoquinoline[3,4-c]furazan, 1,2-dihydro-1-oxoisoquinoline, 6-oxopyrimido[1,2-b]isoquinoline, benzo[c][1,8]-naphthyridine, pyrazino[2,3-c]isoquinoline and benzimidazo[2,1-a]isoquinoline as well as further structurally related isoquinoline derivs. and pyrido-2,3-furazans. Representatives of all of these classes of isoquinolines are potent and selective inhibitors of the cAMP-dependent protein kinase (PKA) catalytic subunit (cAK) from rat liver. The most effective cAK inhibitors are a series of 1,3-di-substituted and 1,3,4-tri-substituted isoquinolines (IC50 values 30-50 nm) (compds. A1, A2, A3, A4 and A5) and 2-ethylcarboxy-3-amino-5,6-dihydro-6-oxobenzo[c][1,8]naphthyridine (E1)(IC50 0.08.mu.m). Compds. A1-A5 inhibit cAK in a fashion that is competitive with respect to ATP as substrate. The isoquinoline inhibitors A1-A5 are ineffective or very poor inhibitors of wheat embryo Ca2+-dependent protein kinase (CDPK) and rat brain Ca2+-dependent protein kinase C (PKC), chicken gizzard myosin light chain kinase (MLCK) and potato tuber cyclic nucleotide-binding phosphatase (Pase). E1 is a moderately effective inhibitor of CDPK and PKC (IC50

values 20 and 61 .mu.m, resp.). The bisisoquinoline-1(2H)-one compd. B7 inhibits cAK, CDPK, PKC and MLCK (IC50 values 8, 95, 24 and 7 .mu.m, resp.) as does J1 [2-(p-bromophenyl)pyrrolo[2,3-c]isoquinoline-5(4H)-one] (IC50 values 2, 50, 44 and 7 .mu.m, resp.). The very potent isoquinoline-derived cAK inhibitors found here involve substitution of the N-contg. isoquinoline ring system and these inhibitors show high specificity for cAK.

IT **180507-73-7**
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); BIOL (Biological study)
(selective inhibition of cAMP-dependent protein kinase, other kinases, and cyclic nucleotide-binding phosphatase by isoquinoline derivs.)

RN 180507-73-7 HCAPLUS

CN 4-Isoquinolinecarbonitrile, 1-[(4-cyano-3-methyl-1H-2-benzopyran-1-ylidene)amino]-3-methyl- (9CI) (CA INDEX NAME)



L30 ANSWER 5 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1996:291499 HCAPLUS

DN 125:57809

TI Electronic effects in isoquinoline systems

AU Zielinski, Wojciech; Kudelko, Agnieszka; Mazik, Monika

CS Institute of Organic Chemistry and Technology, Silesian Technical University, Gliwice, 44-101, Pol.

SO Pol. J. Appl. Chem. (**1995**), 39(1), 33-38
CODEN: PJACE2; ISSN: 0867-8928

DT Journal

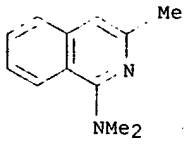
LA English

AB Values of pKa for 1-(N,N-dimethylamino)-3-methylisoquinoline and a series of their 6- and 7-substituted derivs., 3-methylisoquinoline and 1-amino-3-methylisoquinoline were detd. in 50% vol./vol. aq.-methanolic soln. by the spectrophotometric method. The detd. values of pKa and values of pKa for 1-phenyl-3-methylisoquinolines and 1,3-dimethylisoquinolines taken from literature were correlated with the Hammett .sigma. consts. Good correlations were obtained for 6-substituted derivs. with .sigma.p consts. and for 7-substituted derivs. with .sigma.m consts. The electronic effects occurring in the studied isoquinoline systems made by substituents present in pyridine and benzene ring are discussed basing on the detd. values.

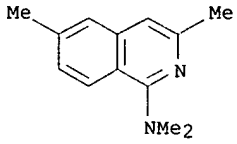
IT **155999-40-9 155999-41-0 155999-42-1**
155999-43-2 155999-44-3 155999-45-4
155999-46-5 177978-22-2
RL: PRP (Properties); RCT (Reactant)
(electronic effects in isoquinolines)

RN 155999-40-9 HCAPLUS

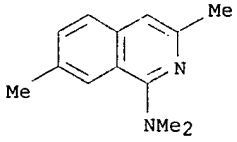
CN 1-Isoquinolinamine, N,N,3-trimethyl- (9CI) (CA INDEX NAME)



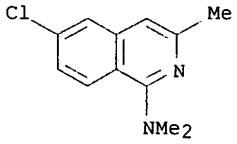
RN 155999-41-0 HCAPLUS
CN 1-Isoquinolinamine, N,N,3,6-tetramethyl- (9CI) (CA INDEX NAME)



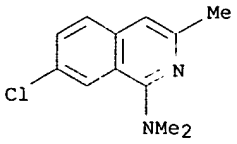
RN 155999-42-1 HCAPLUS
CN 1-Isoquinolinamine, N,N,3,7-tetramethyl- (9CI) (CA INDEX NAME)



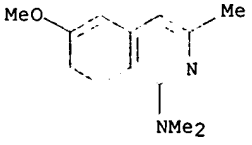
RN 155999-43-2 HCAPLUS
CN 1-Isoquinolinamine, 6-chloro-N,N,3-trimethyl- (9CI) (CA INDEX NAME)



RN 155999-44-3 HCAPLUS
CN 1-Isoquinolinamine, 7-chloro-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

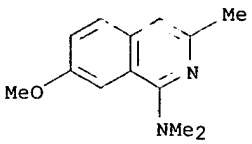


RN 155999-45-4 HCAPLUS
CN 1-Isoquinolinamine, 6-methoxy-N,N,3-trimethyl- (9CI) (CA INDEX NAME)

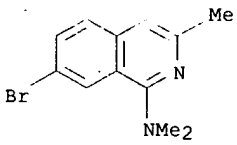


RN 155999-46-5 HCAPLUS

CN 1-Isoquinolinamine, 7-methoxy-N,N,3-trimethyl- (9CI) (CA INDEX NAME)



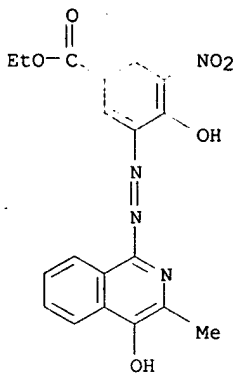
RN 177978-22-2 HCAPLUS
CN 1-Isoquinolinamine, 7-bromo-N,N,3-trimethyl- (9CI) (CA INDEX NAME)



L30 ANSWER 6 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:869485 HCAPLUS
DN 123:343738
TI Perforated transfer printing media and printing process
IN Kawakami, Sota; Nakajima, Atsushi; Maejima, Katsumi; Komamura, Tawara
PA Konishiroku Photo Ind, Japan
SO Jpn. Kokai Tokkyo Koho, 52 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07172059	A2	19950711	JP 1994-235470	19940929 <--
PRAI	JP 1993-266507		19931025		

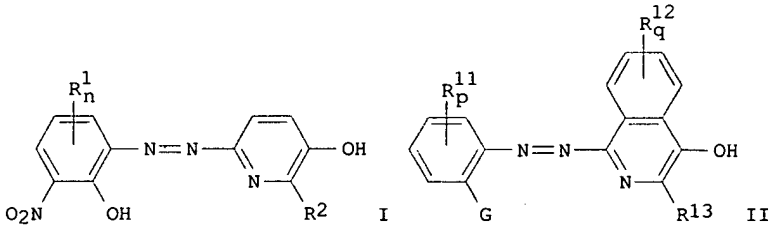
OS MARPAT 123:343738
AB The title media, comprising a base sheet, a coloring layer of chelate color formable compd. mixed with binders (e.g., polyvinyl butyral), and color-barrier layer (e.g., gelatins mixed with IR absorbers), are forming perforation on the barrier layer by heat and/or pressure and transfer printing on a printing sheet (e.g., PET film coated with a soln. contg. polyvinyl butyral, metallic ion-contg. compd., KF-393, X-22-343).
IT **161581-19-7**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(chelate azo dyes; perforated transfer printing media and printing process)
RN 161581-19-7 HCAPLUS
CN Benzoic acid, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro-, ethyl ester (9CI) (CA INDEX NAME)



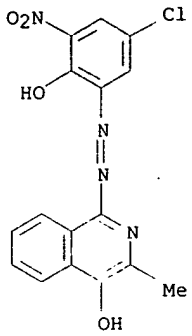
L30 ANSWER 7 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:370786 HCAPLUS
DN 122:201322
TI Thermal-transfer recording material using chelating dye
IN Tanaka, Tatsuo; Kato, Katsunori; Komamura, Tawara
PA Konishiroku Photo Ind, Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 06312582	A2	19941108	JP 1993-102714	19930428 <--

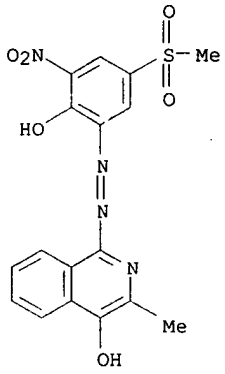
OS MARPAT 122:201322
GI



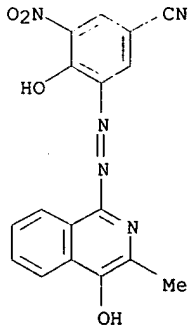
AB The material contains the dye I(R = substituent on benzene ring; n= 0-3; R1= OH, amino) or II (R11 = substituent on benzene ring; R12 = substituent on isoquinoline ring; R13 = H, halo, monovalent substituent; G = chelatable group; p, q = 0-4)in the thermal-transfer layer. The thermal-transfer layer is contacted with a receptor layer, imagewise heated to form a chelating dye by the reaction of the dye with a metal ion to give images. The materials show good storage stability, and give high d. cyan images.
IT **161581-12-0 161581-13-1 161581-14-2**
161581-19-7
RL: DEV (Device component use); USES (Uses)
(thermal-transfer recording material contg. chelating dye)
RN 161581-12-0 HCAPLUS
CN 4-Isoquinolinol, 1-[(5-chloro-2-hydroxy-3-nitrophenyl)azo]-3-methyl- (9CI) (CA INDEX NAME)



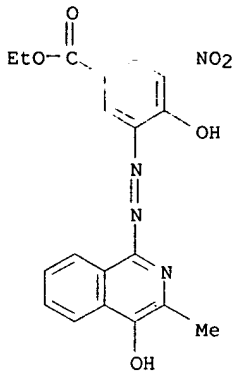
RN 161581-13-1 HCAPLUS
CN 4-Isoquinolinol, 1-[[2-hydroxy-5-(methylsulfonyl)-3-nitrophenyl]azo]-3-methyl- (9CI) (CA INDEX NAME)



RN 161581-14-2 HCAPLUS
CN Benzonitrile, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI) (CA INDEX NAME)



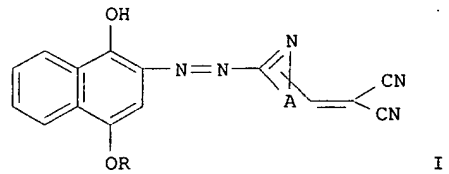
RN 161581-19-7 HCAPLUS
CN Benzoic acid, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro-, ethyl ester (9CI) (CA INDEX NAME)



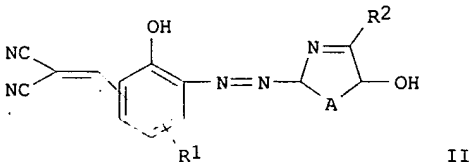
L30 ANSWER 8 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:339706 HCAPLUS
DN 122:174514
TI Thermal-transfer recording material and recording method by chelation
IN Kato, Katsunori; Tanaka, Tatsuo; Komamura, Tawara
PA Konishiroku Photo Ind, Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 06316164	A2	19941115	JP 1993-106738	19930507 <--

OS MARPAT 122:174514
GI



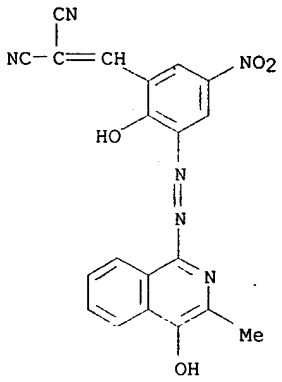
I



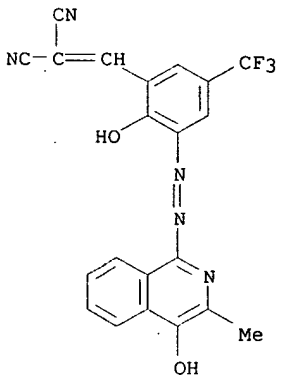
II

AB The material contains an azo dye I [R = (substituted) alkyl, cycloalkyl; A = (substituted) 5- or 6-membered ring, 9- or 10-membered condensed ring] or II [R1, R2 = H, substituent; A = (substituted) 6-membered ring, condensed ring] in a transfer layer on a substrate. Images are formed by thermal chelating reaction of the azo dye with a metal ion. High-d. and stable cyan images are obtained.
IT **161195-94-4 161195-95-5**
RL: DEV (Device component use); RCT (Reactant); USES (Uses)
(thermal-transfer recording material contg. azo chelating dye for cyan image)
RN 161195-94-4 HCAPLUS
CN Propanedinitrile, [[2-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-

5-nitrophenyl]methylene]- (9CI) (CA INDEX NAME)



RN 161195-95-5 HCAPLUS
CN Propanedinitrile, [[2-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-(trifluoromethyl)phenyl]methylene]- (9CI) (CA INDEX NAME)

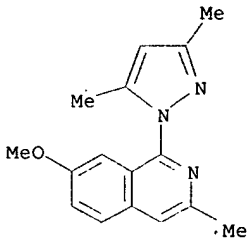


L30 ANSWER 9 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:237241 HCAPLUS
DN 122:81247
TI A short facile route to 1-hydrazinoisoquinoline: Ring closure reactions of substituted 1-hydrazinoisoquinoline derivatives and substituted 2-(4-carbethoxy)phenyl-1(2H)-isoquinolinone derivatives and their biological activity
AU Pinto de Souza, Eleanor; Fernandes, Peter S.
CS NSR Lab., St. Xavier's Coll., Bombay, 400 001, India
SO Indian J. Chem., Sect. B: Org. Chem. Incl. Med. Chem. (1994), 33B(12), 1150-8
CODEN: IJSBDB; ISSN: 0376-4699
DT Journal
LA English
AB A short facile synthesis of 1-hydrazinoisoquinoline from 1-chloroisoquinoline is reported. Substituted 1,2,4-triazolo[3,4-a]isoquinolines were prepd. from 1-hydrazino-7-methoxy-3-methylisoquinoline. The compd. underwent cyclization with acetic anhydride, benzoyl chloride, di-Et malonate, benzoin, nitrous acid, acetylacetone, Et acetoacetate and di-Et acetylenedicarboxylate. Substituted 2-[4-(4-amino-5-mercapto-1,2,4-triazol-3-yl)phenyl]-1(2H)-isoquinolinone was prepd. Furthermore, 2-[4-(s-triazolo[3,4-b][1,3,4]thiadiazol-3-yl)phenyl]-1(2H)-isoquinolinone and

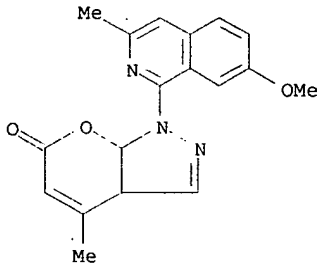
2-[4-(s-triazolo[3,4-b][1,3,4]thiadiazin-3-yl)phenyl]-1(2H)-isoquinolinone were prepd. All the compds. have been tested for their antibacterial activity; by the agar method all compds. were inactive at 50 .mu.g per well.

IT **160518-59-2P 160518-60-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

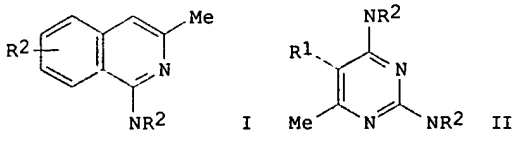
RN 160518-59-2 HCAPLUS
CN Isoquinoline, 1-(3,5-dimethyl-1H-pyrazol-1-yl)-7-methoxy-3-methyl- (9CI) (CA INDEX NAME)



RN 160518-60-5 HCAPLUS
CN Pyrano[2,3-c]pyrazol-6(1H)-one, 3a,7a-dihydro-1-(7-methoxy-3-methyl-1-isoquinolinyl)-4-methyl- (9CI) (CA INDEX NAME)



L30 ANSWER 10 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:457449 HCAPLUS
DN 121:57449
TI Syntheses of 2,4-diaminopyrimidines and 1-aminoisoquinolines in the reactions of alkyl and benzyl ketones with cyanamide and N,N-dimethylcyanamide
AU Zielinski, Wojciech; Mazik, Monika
CS Inst. Org. Chem. Technol., Silesian Tech. Univ., Gliwice, 44-101, Pol.
SO Heterocycles (**1994**), 38(2), 375-82
CODEN: HTCYAM; ISSN: 0385-5414
DT Journal
LA English
GI

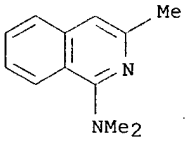


AB The reaction of alkyl and benzyl ketones with cyanamide and

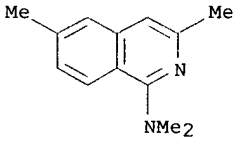
N,N-dimethylcyanamide in the presence of POCl3 was examd. At the first stage, chloroformamidine derivs. were formed. In the presence of TiCl4, they underwent further reactions to give derivs. of 1-aminoisoquinoline I (R2 = Ph, substituted Ph) and 2,4-diaminopyrimidine II (R1 = alkyl, Ph, substituted Ph). The effect of constitution of substrates on adequate ratios of heterocyclic compds. is discussed.

IT **155999-40-9P 155999-41-0P 155999-42-1P**
155999-43-2P 155999-44-3P 155999-45-4P
155999-46-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

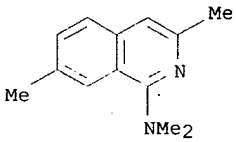
RN 155999-40-9 HCAPLUS
CN 1-Isoquinolinamine, N,N,3-trimethyl- (9CI) (CA INDEX NAME)



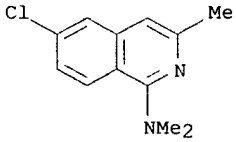
RN 155999-41-0 HCAPLUS
CN 1-Isoquinolinamine, N,N,3,6-tetramethyl- (9CI) (CA INDEX NAME)



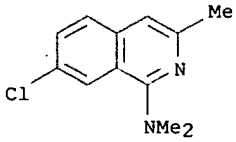
RN 155999-42-1 HCAPLUS
CN 1-Isoquinolinamine, N,N,3,7-tetramethyl- (9CI) (CA INDEX NAME)



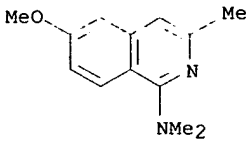
RN 155999-43-2 HCAPLUS
CN 1-Isoquinolinamine, 6-chloro-N,N,3-trimethyl- (9CI) (CA INDEX NAME)



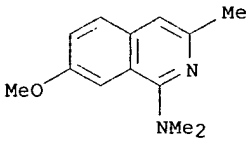
RN 155999-44-3 HCAPLUS
CN 1-Isoquinolinamine, 7-chloro-N,N,3-trimethyl- (9CI) (CA INDEX NAME)



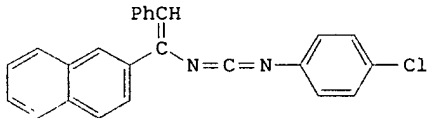
RN 155999-45-4 HCAPLUS
CN 1-Isoquinolinamine, 6-methoxy-N,N,3-trimethyl- (9CI) (CA INDEX NAME)



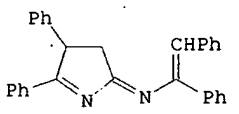
RN 155999-46-5 HCAPLUS
CN 1-Isoquinolinamine, 7-methoxy-N,N,3-trimethyl- (9CI) (CA INDEX NAME)



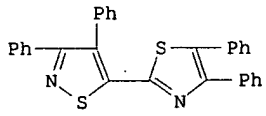
L30 ANSWER 11 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:244949 HCAPLUS
DN 120:244949
TI New syntheses of heterocycles with vinyl- and divinylcarbodiimides: pyrroles, triazoles, pyrimidines, pyrindines, isoquinolines and thiazolylisothiazoles
AU Capuano, Lilly; Hammerer, Volker; Huch, Volker
CS Fachbereich 11.2, Org. Chem., Univ. Saarlandes, Saarbruecken, D-66041, Germany
SO Liebigs Ann. Chem. (**1994**), (1), 23-7
CODEN: LACHDL; ISSN: 0170-2041
DT Journal
LA German
OS CASREACT 120:244949
GI



I



III



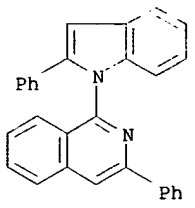
IV

AB The title compds. I and R2CH:CR1N:C:NCR1:CHR2 [II, R1 = Ph, 4-ClC6H4, 2-naphthyl, 4-MeC6H4; R2 = Ph, 4-MeC6H4] react with diazomethane either by loss or by retention of the diazo nitrogen, to afford 3,4-dihydro-2-imino-2H-pyrroles or vic-triazoles, resp. The [4 + 2] addn. of benzylidenemethylamine or alicyclic enamines to II gives partially hydrogenated pyrimidine, pyrindine or isoquinoline. Thermolysis of II proceeds with spontaneous dehydrogenation, giving high yields of 1-(1-indolyl)isoquinolines. The pyrrole III, when melted with sulfur, undergoes both dehydrogenation and sulfur insertion, whereby the hitherto unknown thiazolylisothiazole IV is formed. Its structure has been elucidated by an x-ray diffraction anal. A synthesis of

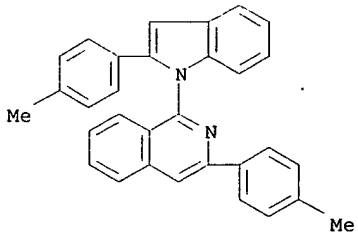
2,3,5-triphenylimidazo[2,1-a]isoquinoline is reported.

IT **154421-00-8P 154421-01-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 154421-00-8 HCAPLUS
CN Isoquinoline, 3-phenyl-1-(2-phenyl-1H-indol-1-yl)- (9CI) (CA INDEX NAME)



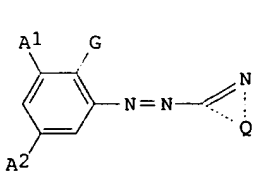
RN 154421-01-9 HCAPLUS
CN Isoquinoline, 3-(4-methylphenyl)-1-[2-(4-methylphenyl)-1H-indol-1-yl]-
(9CI) (CA INDEX NAME)



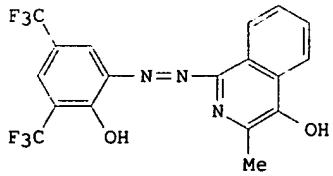
L30 ANSWER 12 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1992:573507 HCAPLUS
DN 117:173507
TI Thermal-transfer recording materials and recording therewith
IN Miura, Akio; Komamura, Tawara; Nakayama, Noritaka
PA Konica K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 04089288	A2	19920323	JP 1990-203739	19900731 <--

OS MARPAT 117:173507
GI



I



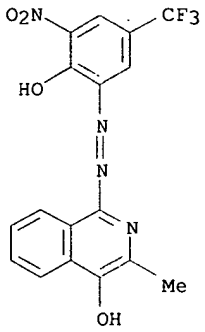
II

AB The title materials providing lightfast high-d. cyan images by chelation with metal ions in the receptor contain a layer contg. cyan dyes I (A1-2 = electron withdrawing group; G = chelating group; Q = a group of atoms

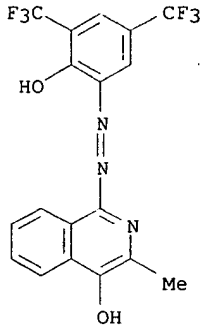
forming 5- or 6- membered heterocyclic ring), e.g., thermally diffusible II.

IT **108831-03-4 108831-05-6 143587-62-6**
RL: USES (Uses)
(dye, cyan, for thermal transfer recording inks)

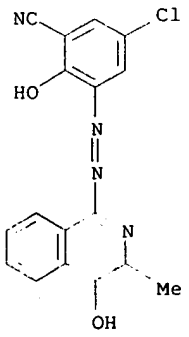
RN 108831-03-4 HCAPLUS
CN 4-Isoquinolinol, 1-[[2-hydroxy-3-nitro-5-(trifluoromethyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME)



RN 108831-05-6 HCAPLUS
CN 4-Isoquinolinol, 1-[[2-hydroxy-3,5-bis(trifluoromethyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME)



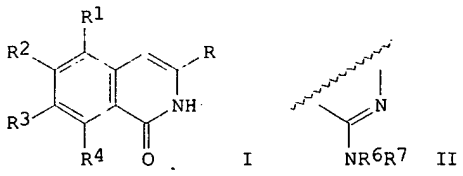
RN 143587-62-6 HCAPLUS
CN Benzonitrile, 5-chloro-2-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)



L30 ANSWER 13 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1990:611863 HCAPLUS
DN 113:211863
TI Preparation of 1(2H)-isoquinolones and 1-isoquinolineamines as neoplasm inhibitors
IN Behrens, Carl H.
PA du Pont de Nemours, E. I., and Co., USA
SO U.S., 13 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4942163	A	19900717	US 1989-322191	19890307 <--

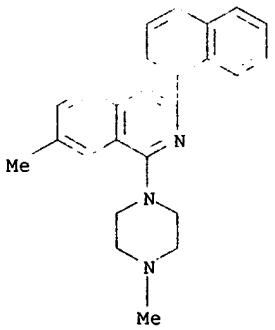
OS MARPAT 113:211863
GI



AB The title compds. [I and II; R = 1-naphthyl; R1, R2, R4 = H, Me, Cl; R3 = H, alkyl, Cl, NR52, N+R53I-; R5 = H, alkyl; R6, R7 = H, alkyl, (CH2)nNR52; NR6R7 = piperazino, 4-alkylpiperazino; n = 2-8] were prepd. Thus, 5-nitro-N,N,2-trimethylbenzamide (prepn. given) was hydrogenated over Pd/C and the product stirred overnight with Zn-modified NaBH3CN in MeOH contg. HCHO to give 2,4-Me(Me2N)C6H4CONMe2 which was stirred 1 h at -78.degree. with (Me2CH)2NLi in THF followed by addn. of 1-cyanonaphthalene and stirring for 3 h to give, after acidification, I.HCl (R1 = R3 = R4 = H, R2 = NMe2). The latter increased survival time of mice inoculated with L1210 murine leukemia cells by 156% over controls at 6 mg/kg/day for 9 days.

IT **130370-12-6P 130370-14-8P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as neoplasm inhibitor)

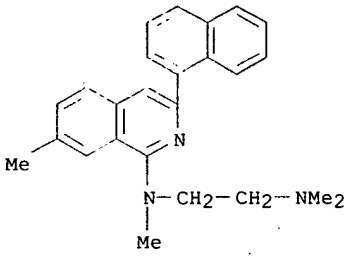
RN 130370-12-6 HCAPLUS
CN Isoquinoline, 7-methyl-1-(4-methyl-1-piperazinyl)-3-(1-naphthalenyl)-(9CI) (CA INDEX NAME)



Previous

RN 130370-14-8 HCAPLUS

CN 1,2-Ethanediamine, N,N,N'-trimethyl-N'-[7-methyl-3-(1-naphthalenyl)-1-isoquinolinyl]- (9CI) (CA INDEX NAME)

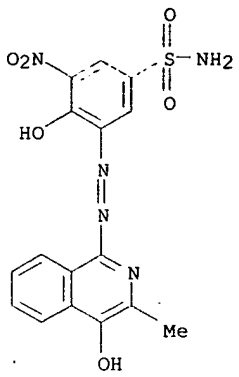


Previous

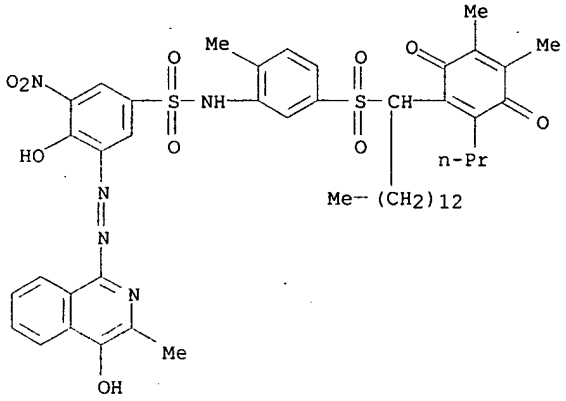
L30 ANSWER 14 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1987:431094 HCAPLUS
DN 107:31094
TI Color photographic recording material
IN Bergthaller, Peter; Schenk, Guenther; Wolfrum, Gerhard; Runzheimer, Hans Volker; Heidenreich, Holger
PA Agfa-Gevaert A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 81 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 3107540	A1	19820916	DE 1981-3107540	19810227 <--
EP 59354	A1	19820908	EP 1982-101076	19820213 <--
EP 59354	B1	19840620		
R: BE, DE, FR, GB				
US 4418143	A	19831129	US 1982-351103	19820222 <--
JP 57158637	A2	19820930	JP 1982-31647	19820227 <--
JP 03068371	B4	19911028		
PRAI DE 1981-3107540		19810227		

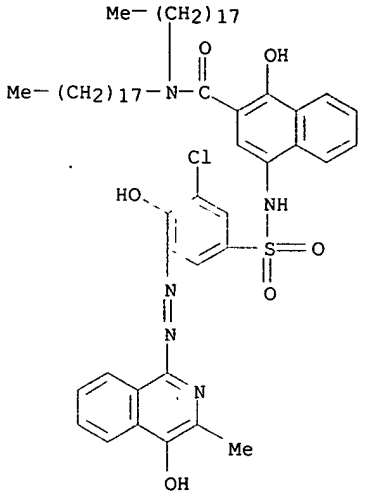
GI For diagram(s), see printed CA Issue.
AB Diffusable azo dyes of the formula I (R, R1 = electroneg. substituents whose meta sigma value .delta.m satisfies .gtoreq.1 of the relations .sigma.m(R), .sigma.m(R1) .gtoreq. +0.33; .sigma.m(R) + .sigma.m(R1) .gtoreq. +0.75; or .sigma.m(R) .gtoreq. +0.33 and R1 = SO2R3 where R3 = M, OH, NH2, NHR4 where R4 = alkyl, aryl, alkylsulfonyl, arylsulfonyl, or acyl; R2 = a chelate-forming group; A = 2-amino-3-hydroxypyridine, a 4,5-diphenylimidazole, or a 4-hydroxyisoquinoline ring) are described which are freed upon imagewise development from the corresponding dye releaser and form blue or cyan metal-dye complexes. The dyes, which are useful in color diffusion-transfer photog. materials, give esp. clear cyan color tones when complexed with Ni and Cu complexes. A polyethylene-coated paper was coated with a red-sensitized gelatin-Ag(Br,I) emulsion contg. an electron donor compd., a dye releaser of the formula II, and an oil former, a protective layer, and a hardening layer. This element was then exposed through a step wedge, combined with a receptor sheet, and then processed to give a dye image with a Dmin of 0.2, a Dmax of 1.9, a relative sensitivity of 85, and a d. loss of 15% when exposed to a Xe light (4.8 .times. 106 lx-h).
IT **108831-02-3**
RL: RCT (Reactant)
(acetylation and chlorination of)
RN 108831-02-3 HCAPLUS
CN Benzenesulfonamide, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI) (CA INDEX NAME)



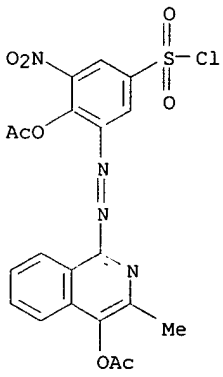
IT **108830-92-8**
RL: USES (Uses)
(photog. azo dye-releasing compd.)
RN 108830-92-8 HCAPLUS
CN Benzenesulfonamide, N-[5-[[1-(4,5-dimethyl-3,6-dioxo-2-propyl-1,4-cyclohexadien-1-yl)tetradecyl]sulfonyl]-2-methylphenyl]-4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI) (CA INDEX NAME)



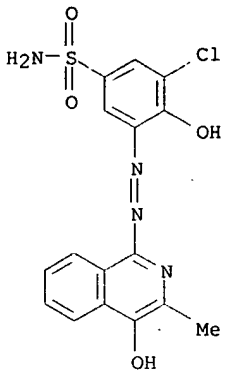
IT **108831-15-8P**
RL: PREP (Preparation)
(prepn. and reaction of diazotized)
RN 108831-15-8 HCAPLUS
CN 2-Naphthalenecarboxamide, 4-[[[3-chloro-4-hydroxy-5-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]phenyl]sulfonyl]amino]-1-hydroxy-N,N-dioctadecyl- (9CI) (CA INDEX NAME)



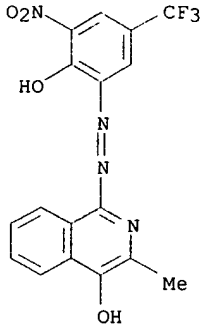
IT **108831-13-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with cetyloxyphenylaminoindole)
RN 108831-13-6 HCAPLUS
CN Benzenesulfonyl chloride, 4-(acetyloxy)-3-[[4-(acetyloxy)-3-methyl-1-isoquinolinyl]azo]-5-nitro- (9CI) (CA INDEX NAME)



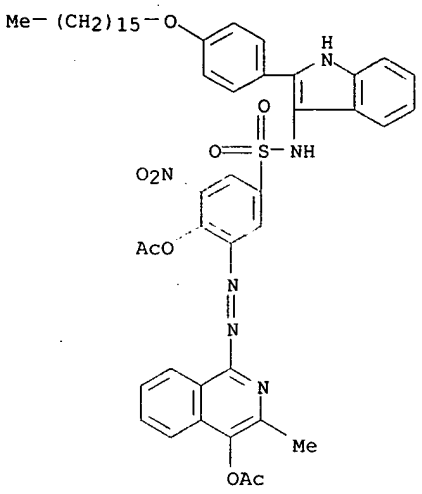
IT **108831-00-1P 108831-03-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 108831-00-1 HCAPLUS
CN Benzenesulfonamide, 3-chloro-4-hydroxy-5-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)



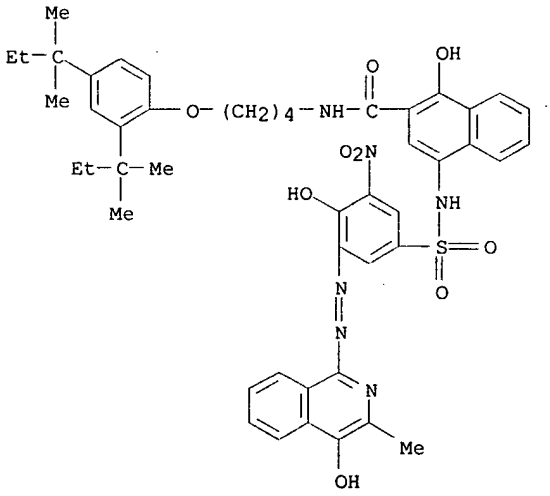
RN 108831-03-4 HCAPLUS
CN 4-Isoquinolinol, 1-[[2-hydroxy-3-nitro-5-(trifluoromethyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME)



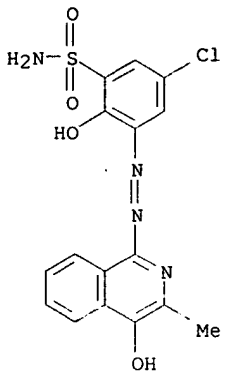
IT **108830-94-0P 108830-95-1P**
RL: PREP (Preparation)
(prepn. of, as photog. diffusible azo dye-releasing compd.)
RN 108830-94-0 HCAPLUS
CN Benzenesulfonamide, 4-(acetyloxy)-3-[[4-(acetyloxy)-3-methyl-1-isoquinolinyl]azo]-N-[2-[4-(hexadecyloxy)phenyl]-1H-indol-3-yl]-5-nitro- (9CI) (CA INDEX NAME)



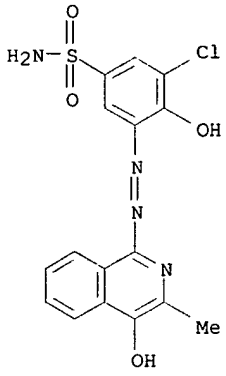
RN 108830-95-1 HCAPLUS
CN 2-Naphthalenecarboxamide, N-[4-[2,4-bis(1,1-dimethylpropyl)phenoxy]butyl]-1-hydroxy-4-[[[4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitrophenyl]sulfonyl]amino]- (9CI) (CA INDEX NAME)



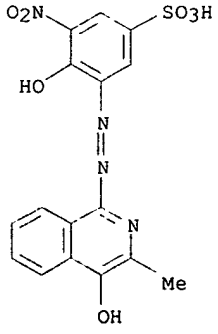
IT **108830-99-5D**, nickel complex **108831-00-1D**, copper and nickel complexes **108831-01-2D**, nickel complex **108831-02-3D**, copper and nickel complexes **108831-03-4D**, nickel complex **108831-04-5D**, copper and nickel complexes **108831-05-6D**, nickel complex **108859-46-7D**, nickel complex
RL: PRP (Properties)
(spectral properties of, color photog. applications in relation to)
RN 108830-99-5 HCAPLUS
CN Benzenesulfonamide, 5-chloro-2-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)



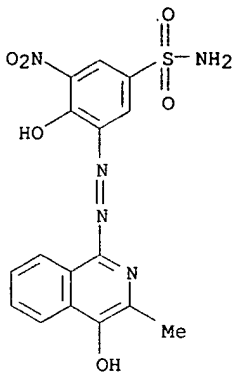
RN 108831-00-1 HCAPLUS
CN Benzenesulfonamide, 3-chloro-4-hydroxy-5-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)



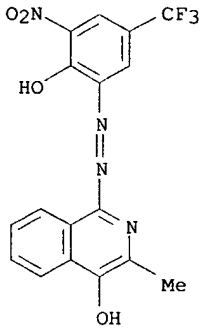
RN 108831-01-2 HCAPLUS
CN Benzenesulfonic acid, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI) (CA INDEX NAME)



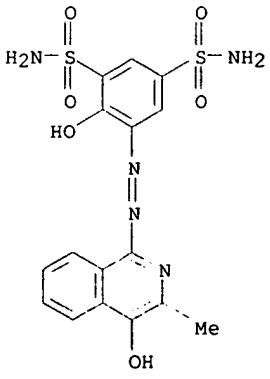
RN 108831-02-3 HCAPLUS
CN Benzenesulfonamide, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI) (CA INDEX NAME)



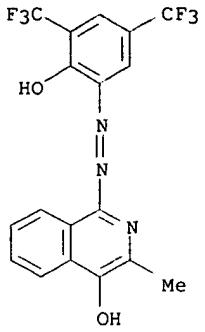
RN 108831-03-4 HCAPLUS
CN 4-Isoquinolinol, 1-[[2-hydroxy-3-nitro-5-(trifluoromethyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME)



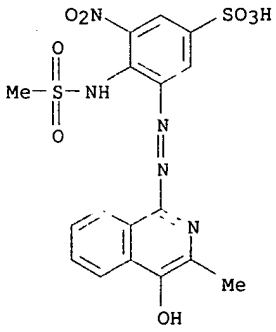
RN 108831-04-5 HCAPLUS
CN 1,3-Benzenedisulfonamide, 4-hydroxy-5-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)



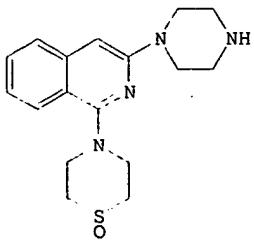
RN 108831-05-6 HCAPLUS
CN 4-Isoquinolinol, 1-[[2-hydroxy-3,5-bis(trifluoromethyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME)



RN 108859-46-7 HCAPLUS
CN Benzenesulfonic acid, 3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-4-[(methylsulfonyl)amino]-5-nitro- (9CI) (CA INDEX NAME)



L30 ANSWER 15 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1986:604283 HCAPLUS
DN 105:204283
TI Cytoplasmic vacuolation of pancreatic .beta. cells of rats after oral administration of a derivative of isoquinoline
AU Kast, A.; Ueberberg, H.
CS Dep. Exp. Pathol., Nippon Boehringer Ingelheim Co., Ltd., Yato, Japan
SO Toxicol. Appl. Pharmacol. (1986), 85(2), 274-85
CODEN: TXAPA9; ISSN: 0041-008X
DT Journal
LA English
GI

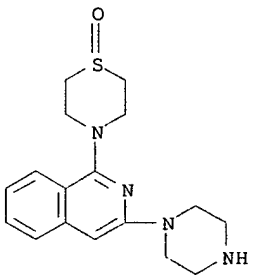


I

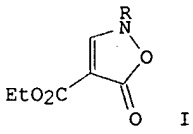
AB Islet of Langerhans .beta.-cells were studied in Sprague-Dawley rats dosed

by gavage with 0 (control), 75, 150, 250 or 300 mg/kg/day SH 966BS (I) [**58138-24-2**]. All doses caused a significant and dose-dependent increase in serum glucose (diabetes mellitus). At 250 mg/kg, degranulation of .beta.-cells was discovered after 1 day and vacuole formation after 2 days. Ultrastructural alterations compared well with that seen after treatment with cyproheptadine and other structurally related compds. The vacuolation of .beta.-cells was fully developed following 6 wk of daily treatment, when a dose-dependent elevation of blood glucose was 1st obsd. The effects were more severe in males than in females. Lesions were reversible within 6 wk except at 300 mg/kg in males.

IT **58138-24-2**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(toxicity of, to pancreas .beta.-cells, cytoplasmic vacuolation response to)
RN 58138-24-2 HCAPLUS
CN Isoquinoline, 1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)- (9CI) (CA INDEX NAME)



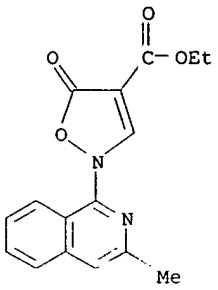
L30 ANSWER 16 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1986:88467 HCAPLUS
DN 104:88467
TI Central nervous system active compounds. XV. 2-Arylisoxazol-5(2H)-ones
AU Hung, Tran V.; Janowski, Wit K.; Prager, Rolf H.
CS Dep. Org. Chem., Univ. Adelaide, Adelaide, 5001, Australia
SO Aust. J. Chem. (**1985**), 38(6), 931-7
CODEN: AJCHAS; ISSN: 0004-9425
DT Journal
LA English
OS CASREACT 104:88467
GI



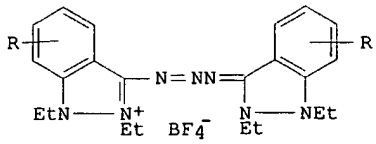
I

AB Et 5-oxo-2,5-dihydroisoxazole-4-carboxylate was treated with a no. of chlorinated heterocycles to yield the corresponding substitution products I (R = isoquinolinyl, quinolinyl, purinyl, pyrimidinyl, pyridinyl, pyridazinyl, benzothiazolyl, quinazolinyl, triazinyl). I generally cause loss of motor control in mice, but are relatively toxic.

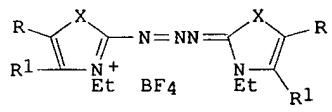
IT **100422-70-6P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and central nervous system activity of)
RN 100422-70-6 HCAPLUS
CN 4-Isoxazolecarboxylic acid, 2,5-dihydro-2-(3-methyl-1-isoquinolinyl)-5-oxo-, ethyl ester (9CI) (CA INDEX NAME)



L30 ANSWER 17 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1985:561857 HCAPLUS
DN 103:161857
TI Photoisomerization and relaxation of symmetrical triazacarbocyanine dyes in an alcohol mixture
AU Balli, Heinz; Eichenberger, Thomas; Hellrung, Bruno; Scheibli, Peter
CS Inst. Farbenchem., Univ. Basel, Basel, CH-4056, Switz.
SO Helv. Chim. Acta (**1985**), 68(5), 1394-400
CODEN: HCACAV; ISSN: 0018-019X
DT Journal
LA German
GI



I

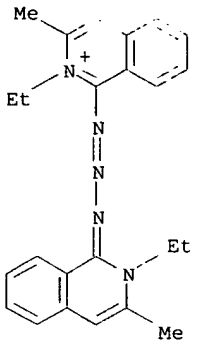


II

AB Photoisomerization of I (R = H, Br, NH2, NO2) and of II (R = H and R1 = H, Me or RR1 = benzo, 1,2-naphtho; X = S, Se, CH:CH, o-C6H4) in 90:5:5 EtOH-MeOH-iso-PrOH at 110-250 K was followed by a 1st-order thermal reverse isomerization in the dark. For II (R = R1 = H, X = CH:CH) [2805-63-2] the irradn. resulted in a decrease in visible absorption intensity with no shift in .lambda.max, whereas most of the other II showed a hypsochromic shift of .lambda.max accompanied by a decrease in intensity. For II (R = R1 = H, X = o-C6H4) [3801-71-6] and 3 other II, irradn. resulted in a shift in the ratio of intensities of 2 absorption bands. With I the electron-donor substituents (OMe, NH2) increased the rate of the dark reaction and NO2 groups decreased the rate. The mechanism proposed involves cis-trans isomerization around the N:N bond, by inversion after partial rotation.
IT **98621-70-6**
RL: USES (Uses)
(photoisomerization and subsequent thermal reversion of, kinetics and mechanism of)
RN 98621-70-6 HCAPLUS
CN Isoquinolinium, 2-ethyl-1-[3-(2-ethyl-3-methyl-1(2H)-isoquinolinylidene)-1-triazenyl]-3-methyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

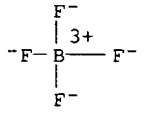
CM 1

CRN 98621-69-3
CMF C24 H26 N5



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

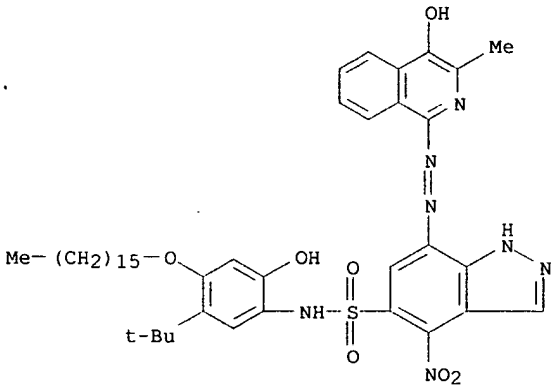


L30 ANSWER 18 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1985:87554 HCAPLUS
DN 102:87554
TI Silver halide color photographic materials
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

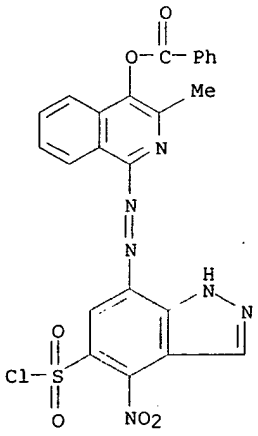
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 59154448	A2	19840903	JP 1983-28927	19830223 <--

GI For diagram(s), see printed CA Issue.
AB Ag halide color photog. photosensitive materials contain azo dye forming compd. I or II (A = heterocycle; B = 5-membered heterocycle; Z = bond, divalent moiety; R = group which is sepd. from the azo dye or its precursor during processing by an alk. soln.; R1, R2 = H, or a substituent which does not exhibit photog. degrdn. effects). The dyes formed from I or II form stable chelates with metals, and hence useful for forming stable images in image receptor layer. Thus, a polyester film support was coated with (1) a dye-mordanting layer contg. Ni acetate and divinylbenzene-N-methyl-N-(vinylbenzyl)piperidinium chloride-styrene copolymer, (2) a layer contg. acylamide-Na N-vinylbenzyliminodiacetate copolymer, (3) a reflector layer contg. TiO2, (4) a carbon black-contg. layer, (5) a layer contg. III, (6) a red-sensitive internal latent image type Ag halide emulsion layer, (7) a gelatin layer contg. 2,5-di-tert-pentadecylhydroquinone, and (8) an overcoat layer to give a diffusion transfer photosensitive film. The diffusion transfer photog. film gave images with azo dye-Ni chelate (having .gamma.max 650) with high Dmax and low Dmin.
IT **94767-38-1P**
RL: PREP (Preparation)

(prepn. of, as diffusion-transfer photog. dye-releasing compd.)
RN 94767-38-1 HCAPLUS
CN 1H-Indazole-5-sulfonamide, N-[5-(1,1-dimethylethyl)-4-(hexadecyloxy)-2-hydroxyphenyl]-7-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-4-nitro- (9CI) (CA INDEX NAME)

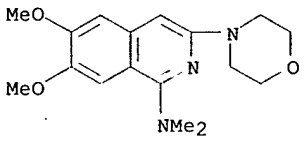


IT **94737-95-8**
RL: RCT (Reactant)
(reaction of, with amino-tert-butylhexadecyloxyphenol hydrochloride)
RN 94737-95-8 HCAPLUS
CN 1H-Indazole-5-sulfonyl chloride, 7-[[4-(benzoyloxy)-3-methyl-1-isoquinolinyl]azo]-4-nitro- (9CI) (CA INDEX NAME)



L30 ANSWER 19 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1982:615949 HCAPLUS
DN 97:215949
TI A synthesis of alkylated 3-aminoisoquinolines and related compounds
AU Liepa, Andris J.
CS Div. Appl. Org. Chem., CSIRO, Melbourne, 3001, Australia
SO Aust. J. Chem. (**1982**), 35(7), 1391-403
CODEN: AJCHAS; ISSN: 0004-9425
DT Journal
LA English
AB N,N-Dialkyl derivs. of 3-aminoisoquinoline have been prepd. by reaction of nitriles with various arylacetic acid tertiary amides in the presence of POCl3. The synthesis has been extended to include a benzoisoquinoline and annulated isoquinolines by the selection of appropriate amide and nitrile

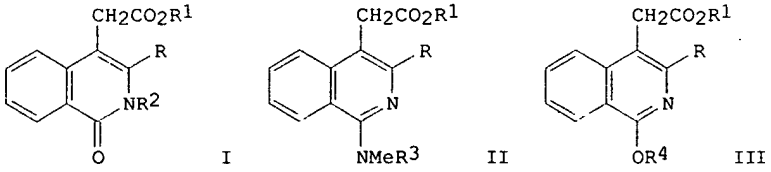
precursors.
IT **83814-30-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 83814-30-6 HCAPLUS
CN 1-Isoquinolinamine, 6,7-dimethoxy-N,N-dimethyl-3-(4-morpholinyl)- (9CI)
(CA INDEX NAME)



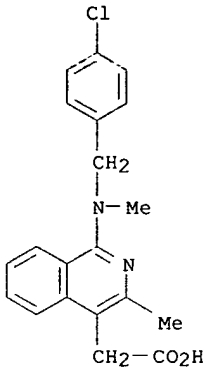
L30 ANSWER 20 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1981:569009 HCAPLUS
DN 95:169009
TI Isoquinoline acetic acids and pharmaceutical compositions containing them
IN Schnur, Rodney Caughren
PA Pfizer Inc., USA
SO Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 30861	A2	19810624	EP 1980-304517	19801215 <--
	EP 30861	A3	19810923		
	EP 30861	B1	19830727		
	R: BE, CH, DE, FR, GB, IT, LU, NL, SE				
	US 4283539	A	19810811	US 1979-104939	19791218 <--
	JP 56092871	A2	19810727	JP 1980-177066	19801215 <--
	JP 62010508	B4	19870306		
	DK 8005364	A	19810619	DK 1980-5364	19801217 <--
	DK 149569	B	19860728		
	DK 149569	C	19870202		
PRAI	US 1979-104939		19791218		

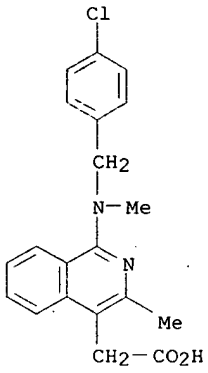
GI



AB Acids and esters I, II, and III [R = H, Me; R1 = H, alkyl; R2 = (un)substituted benzyl or benzyloxy; R3 = (un)substituted benzyl; R4 = Ph, chloro-, bromo-, or fluorophenyl, (un)substituted benzyl] were prepd. and they inhibited aldose reductase. 2-Methyl-1-oxo-3-indanacetic acid was treated with BuONO, the I (R = Me, R1 = H, R2 = OH) obtained was dehydroxylated, and the product treated with 3,4-Cl2C6H3CH2Cl to give I (R = Me, R1 = H, R2 = 3,4-Cl2C6H3CH2).
IT **79456-23-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 79456-23-8 HCAPLUS
CN 4-Isoquinolineacetic acid, 1-[[(4-chlorophenyl)methyl]methylamino]-3-methyl- (9CI) (CA INDEX NAME)



IT **79456-22-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of and inhibitioin of aldose reductase by)
RN 79456-22-7 HCAPLUS
CN 4-Isoquinolineacetic acid, 1-[[(4-chlorophenyl)methyl]methylamino]-3-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L30 ANSWER 21 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1981:174912 HCAPLUS
DN 94:174912
TI Aminoisoquinoline derivatives
PA E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.
SO Neth. Appl., 20 pp.
CODEN: NAXXAN
DT Patent
LA Dutch
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 8002119	A	19801014	NL 1980-2119	19800411 <--
	HU 20959	O	19810928	HU 1979-EE2647	19790411 <--
	HU 178522	P	19820528		
	GB 2048256	A	19801210	GB 1980-10793	19800331 <--
	GB 2048256	B2	19830518		
	BE 882674	A1	19801008	BE 1980-9778	19800408 <--
	AU 8057302	A1	19801016	AU 1980-57302	19800410 <--

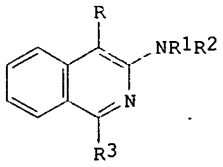
L30 ANSWER 21 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1981:174912 HCAPLUS
DN 94:174912
TI Aminoisoquinoline derivatives
PA E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.
SO Neth. Appl., 20 pp.
CODEN: NAXXAN
DT Patent
LA Dutch
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 8002119	A	19801014	NL 1980-2119	19800411 <--
	HU 20959	O	19810928	HU 1979-EE2647	19790411 <--
	HU 178522	P	19820528		
	GB 2048256	A	19801210	GB 1980-10793	1980033i <--
	GB 2048256	B2	19830518		
	BE 882674	A1	19801008	BE 1980-9778	19800408 <--
	AU 8057302	A1	19801016	AU 1980-57302	19800410 <--

SEARCHED BY SUSAN HANLEY Phone: 305-4053

	AU 535462	B2	19840322		
	FR 2453855	A1	19801107	FR 1980-8052	19800410 <--
	FR 2453855	B1	19830826		
	DD 150055	C	19810812	DD 1980-220351	19800410 <--
	US 4324894	A	19820413	US 1980-138843	19800410 <--
	CH 643833	A	19840629	CH 1980-2742	19800410 <--
	JP 55149261	A2	19801120	JP 1980-46957	19800411 <--
	DE 3013998	A1	19801211	DE 1980-3013998	19800411 <--
	ES 490506	A1	19810216	ES 1980-490506	19800411 <--
	CS 216218	B2	19821029	CS 1980-2538	19800411 <--
	SU 1033001	A3	19830730	SU 1980-2905799	19800411 <--
	AT 8001972	A	19831015	AT 1980-1972	19800411 <--
	AT 374798	B	19840525		
PRAI	HU 1979-EE2647		19790411		

GI



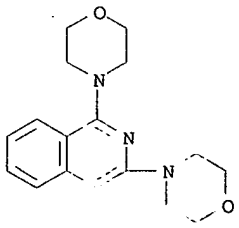
I

AB Aminoisoquinolines I (R, R1 = H, alkyl; R2 = H, alkyl, optionally substituted Ph, pyridyl, dialkylaminoalkyl; NR1R2 = heterocyclic; R3 = alkoxy, amino) were prepd. Thus I (R = Me, R1 = R2 = H, R3 = Br) was treated with morpholine to give 83% I (R = Me, R1 = R2 = H, R3 = morpholino) which had a spontaneous motility-inhibiting ED50 of 400 mg/kg orally in mice. I (R-R2 = H, R3 = morpholino) had an analgesic ED50 of 100 mg/kg orally in the HOAc writhing test in mice and a therapeutic index of 20.

IT **77454-38-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 77454-38-7 HCAPLUS

CN Isoquinoline, 1,3-di-4-morpholinyl- (9CI) (CA INDEX NAME)



L30 ANSWER 22 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1980:22393 HCAPLUS

DN 92:22393

TI 1-Amino-4-phenylisoquinoline derivatives

IN Simmonds, Robin George

PA Aspro-Nicholas Ltd., Engl.

SO Brit., 16 pp.
CODEN: BRXXAA

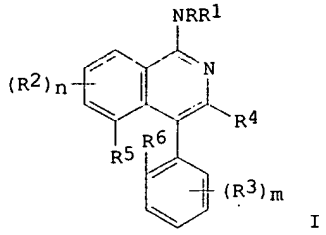
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 1545767	A	19790516	GB 1975-31144	19760630 <--

GI



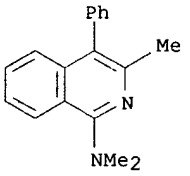
I

AB The prepn. is described of title compds. I (R, R1 = H, C1-12 alkyl; RNR1 = piperazinyl optionally substituted by C1-12 alkyl or hydroxyalkyl; n = 0 - 3; m = 0 - 4; R2,R3 = C1-12 alkyl optionally substituted by .gtoreq.1 halo, C1-12 alkoxy, halo; R4 = H, C1-12 alkyl; R5,R6 = H or C1-12 alkyl, alkylthio, alkoxy; R5R6 = bond, O, S, C1-3 alkylene optionally contg. .gtoreq.1 O or S), which show antiinflammatory (esp. antirheumatic) and/or central nervous system activity. Thus, 3-dimethylamino-7,8-dihydrobenzo[1,2]cyclohepta[3.4.5-de]isoquinoline hydrogen maleate was prepd. from dibenzo[ad]suberone by sequential treatment with NaH/Me3S+ I-, BF3.Me2O/CH2Cl2, and H2NCO2Et/H2SO4 followed by heating (256.degree., 1 h), refluxing with POCl3, and Me2NH/EtOH treatment. The yields of the 6 steps were 96, 98, 100, 89, 99, and 75.6%, resp. Compns. contg. I are described.

IT **72240-39-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 72240-39-2 HCAPLUS

CN 1-Isoquinolinamine, N,N,3-trimethyl-4-phenyl- (9CI) (CA INDEX NAME)



L30 ANSWER 23 OF 35 HCAPLUS COPYRIGHT 2001 ACS

AN 1979:466274 HCAPLUS

DN 91:66274

TI Photographic products and processes employing nondiffusible 1-arylazo-4-isoquinolinol dye-releasing compounds

IN Chapman, Derek D.; Friday, James A.; Elwood, James K.

PA Eastman Kodak Co., USA

SO U.S., 21 pp.
CODEN: USXXAM

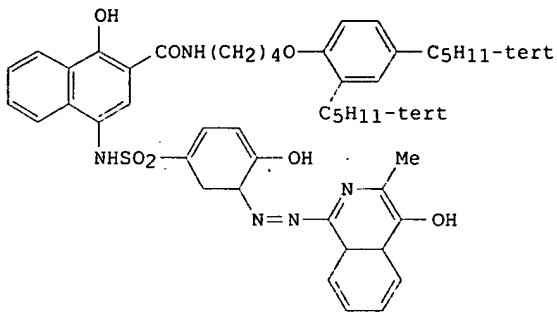
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4148642	A	19790410	US 1978-884469	19780307 <--
	US 4183754	A	19800115	US 1978-950194	19781010 <--
PRAI	US 1978-884469		19780307		

GI



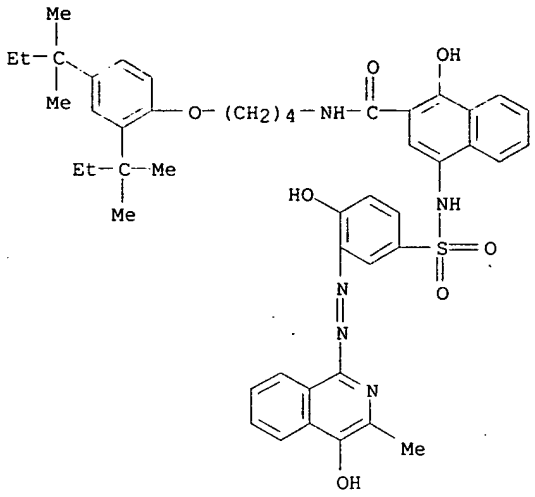
I

AB Photog. elements, diffusion-transfer assemblages, and processes are described which employ a novel nondiffusible compd. having a releaseable 1-arylazo-4-isoquinolinol dye moiety. The compd. contains in the ortho position of the arylazo moiety a metal chelating group, a salt thereof, or a hydrolyzable precursor thereof, and a ballasted carrier moiety which is capable of releasing the diffusable azo dye under alk. conditions. The dye is transferred imagewise to an image-receiving layer where it is contacted with metal ions to form a metal complexed azo dye transfer image of excellent stability. Thus, a single-color integral-imaging receiver element was prepd. by coating successively on a polyester film support a metalizing layer comprising gelatin (1.08 g/m2) and NiSO4.6H2O (0.58 g/m2), a receiving layer consisting of gelatin and poly(4-vinylpyridine) (each at 2.15 g/m2), a reflecting layer comprising TiO2 and gelatin in 6.25/1 ratio, an opaque layer of C in gelatin, a layer consisting of gelatin and a dispersion of I (prepd. by reaction of 3-methyl-4-isoquinolinol with diazotized 4-(3-amino-4-hydroxybenzenesulfonamido)-1-hydroxy-N-[4-(2,4-di-tert-phenylphnoxybutyl]-2-naphthamide) (0.84 g/m2), a layer of red sensitized internal image emulsion, a layer of dodecylhydroquinone(1.29 g/m2) dispersed in gelatin (1.61 g/m2), and a gelatin overcoat layer. This integral element was exposed to a multicolor test object and then processed to show a d. at .lambda.max after 4 min of 1.11, a .lambda.max of 637 nm, a half bandwidth of 127, and a d. change after exposure to a 5000 ft-candle light source for 2 days of -0.03 vs 1.41, 544, 186, and -0.18, resp., for a Ni2+ -free control.

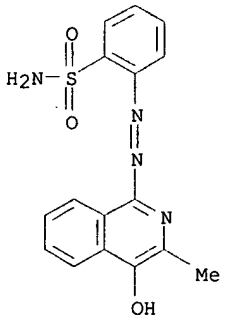
IT **70881-90-2**
RL: USES (Uses)
(azo dye-releasing compd., for color photog.)

RN 70881-90-2 HCAPLUS

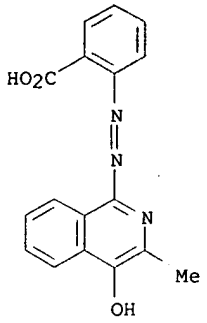
CN 2-Naphthalenecarboxamide, N-[4-[2,4-bis(1,1-dimethylpropyl)phenoxy]butyl]-1-hydroxy-4-[[[4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]phenyl]sulfonyl]amino]- (9CI) (CA INDEX NAME)



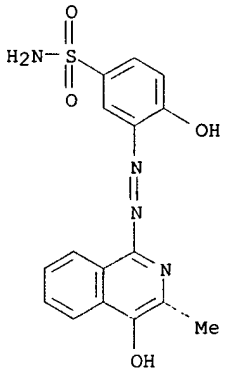
IT **70881-91-3 70881-92-4 70881-93-5**
70881-94-6 70881-95-7 70881-96-8
70881-97-9 70882-04-1
RL: PRP (Properties)
(spectrum of)
RN 70881-91-3 HCAPLUS
CN Benzenesulfonamide, 2-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)



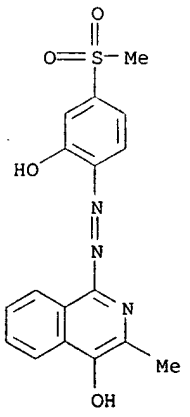
RN 70881-92-4 HCAPLUS
CN Benzoic acid, 2-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)



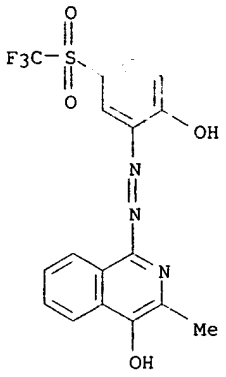
RN 70881-93-5 HCAPLUS
CN Benzenesulfonamide, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]- (9CI) (CA INDEX NAME)



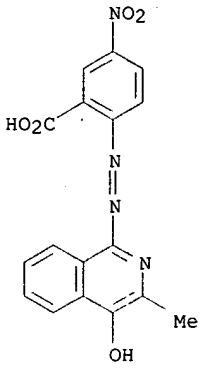
RN 70881-94-6 HCAPLUS
CN 4-Isoquinolinol, 1-[[2-hydroxy-4-(methylsulfonyl)phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME)



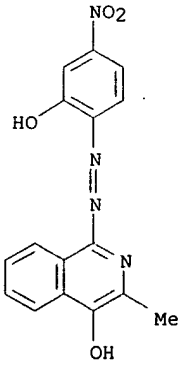
RN 70881-95-7 HCAPLUS
CN 4-Isoquinolinol, 1-[[2-hydroxy-5-[(trifluoromethyl)sulfonyl]phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME)



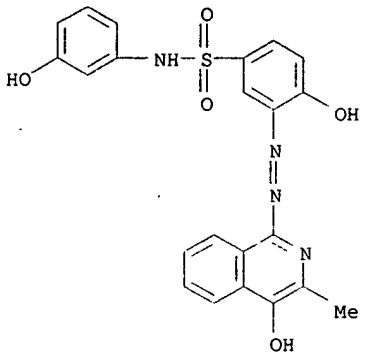
RN 70881-96-8 HCAPLUS
CN Benzoic acid, 2-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-5-nitro- (9CI) (CA INDEX NAME)



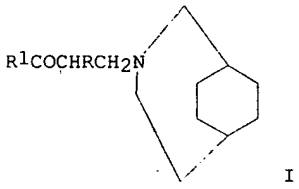
RN 70881-97-9 HCAPLUS
CN 4-Isoquinolinol, 1-[(2-hydroxy-4-nitrophenyl)azo]-3-methyl- (9CI) (CA INDEX NAME)



RN 70882-04-1 HCAPLUS
CN Benzenesulfonamide, 4-hydroxy-3-[(4-hydroxy-3-methyl-1-isoquinolinyl)azo]-N-(3-hydroxyphenyl)- (9CI) (CA INDEX NAME)

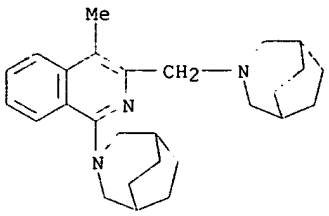


L30 ANSWER 24 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1977:601283 HCAPLUS
DN 87:201283
TI Synthesis and antitussive activity of 3-azabicyclo[3.2.2]nonane derivatives
AU Arya, V. P.; Kaul, C. L.; Grewal, R. S.
CS Ciba-Geigy Res. Cent., Bombay, India
SO Arzneim.-Forsch. (1977), 27(9), 1648-52
CODEN: ARZNAD
DT Journal
LA English
GI



I

AB Mannich bases I (R = Me, H, Et, Pr; R1 = 4-FC6H4, 4-PhCH2OC6H4, 4-BrC6H4, 4-ClC6H4, 3-pyridyl, 3-indolyl, 2-thienyl), prepd. from the substituted acetophenones and propiophenones and 3-azabicyclo[3.2.2]nonane, were evaluated for antitussive activity. I (R = Me, R1 = 4-PhCH2OC6H4) (II) was as potent as codeine and dextromethorphan in its antitussive activity. II also exhibited antimorphine activity. There was no direct correlation between the antitussive effect and antimorphine activity.
IT **64686-73-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 64686-73-3 HCAPLUS
CN 3-Azabicyclo[3.2.2]nonane, 3-[3-[(3-azabicyclo[3.2.2]non-3-yl)methyl]-4-methyl-1-isoquinolinyl]-, trihydrochloride (9CI) (CA INDEX NAME)

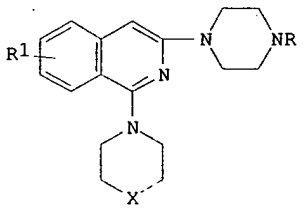


●3 HCl

L30 ANSWER 25 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1976:560167 HCAPLUS
DN 85:160167
TI Piperazinoisoquinolines
PA Thomae, Dr. Karl, G.m.b.H., Ger.
SO Fr. Demande, 22 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2268524	A1	19751121	FR 1975-13095	19750425 <--
	DE 2420012	A1	19751120	DE 1974-2420012	19740425 <--
	DE 2420012	B2	19790517		
	DE 2420012	C3	19800110		
	DE 2503961	A1	19760805	DE 1975-2503961	19750131 <--
	DE 2503961	B2	19790705		
	DE 2503961	C3	19800228		
	CH 615180	A	19800115	CH 1979-1429	19790214 <--
PRAI	DE 1974-2420012		19740425		
	DE 1975-2503961		19750131		
	CH 1975-5155		19750423		

GI



I

AB Piperazinylisoquinolines I (R = H, R1 = H, 5-Me, 5-Cl, 7-Cl, 5-F, 5-OMe, 5-NO2, X = S, SO; R = Ac, CHO, R1 = H, X = SO; R = Ac, CO2Et, Me, H, R1 = 5-Me, X = SO; R = H, Me, R1 = H, X = O; R = Ac, R1 = 5-NO2, X = S) were prepd. e. g. by treating 1,3-dichloroisoquinoline with the morpholine deriv. followed by treating with a piperazine deriv. I are platelet aggregation inhibitors. Thus in the test according to Morris I (R = H, R1 = 5-Cl, X = SO) gave 92% inhibition at 10-4 mole/l.

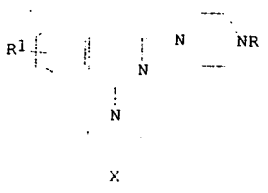
IT **60691-16-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and acylation of)

RN 60691-16-9 HCAPLUS
CN Isoquinoline, 5-nitro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

L30 ANSWER 25 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1976:560167 HCAPLUS
DN 85:160167
TI Piperazinoisoquinolines
PA Thomae, Dr. Karl, G.m.b.H., Ger.
SO Fr. Demande, 22 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2268524	A1	19751121	FR 1975-13095	19750425 <--
	DE 2420012	A1	19751120	DE 1974-2420012	19740425 <--
	DE 2420012	B2	19790517		
	DE 2420012	C3	19800110		
	DE 2503961	A1	19760805	DE 1975-2503961	19750131 <--
	DE 2503961	B2	19790705		
	DE 2503961	C3	19800228		
	CH 615180	A	19800115	CH 1979-1429	19790214 <--
PRAI	DE 1974-2420012		19740425		
	DE 1975-2503961		19750131		
	CH 1975-5155		19750423		

GI



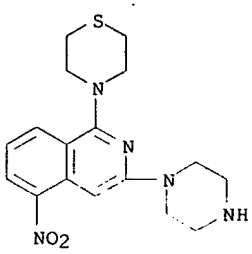
X I

AB Piperazinylisoquinolines I (R = H, R1 = H, 5-Me, 5-Cl, 7-Cl, 5-F, 5-OMe, 5-NO2, X = S, SO; R = Ac, CHO, R1 = H, X = SO; R = Ac, CO2Et, Me, H, R1 = 5-Me, X = SO; R = H, Me, R1 = H, X = O; R = Ac, R1 = 5-NO2, X = S) were prepd. e. g. by treating 1,3-dichloroisoquinoline with the morpholine deriv. followed by treating with a piperazine deriv. I are platelet aggregation inhibitors. Thus in the test according to Morris I (R = H, R1 = 5-Cl, X = SO) gave 92% inhibition at 10-4 mole/l.

IT **60691-16-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and acylation of)

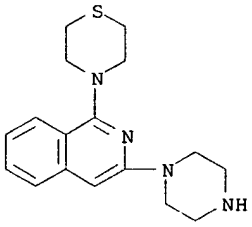
RN 60691-16-9 HCAPLUS

CN Isoquinoline, 5-nitro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

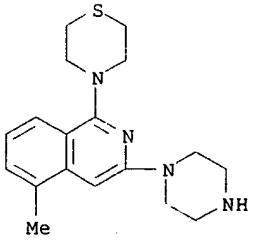


● HCl

IT **58138-21-9P 60691-07-8P 60691-10-3P**
60691-12-5P 60691-13-6P 60691-15-8P
60691-17-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and oxidn. of)
RN 58138-21-9 HCAPLUS
CN Isoquinoline, 3-(1-piperazinyl)-1-(4-thiomorpholinyl)- (9CI) (CA INDEX NAME)

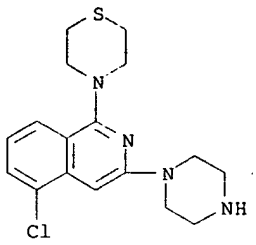


RN 60691-07-8 HCAPLUS
CN Isoquinoline, 5-methyl-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 60691-10-3 HCAPLUS
CN Isoquinoline, 5-chloro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

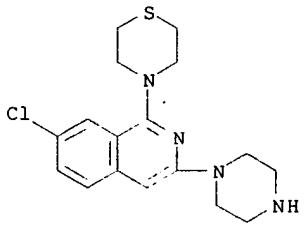


● HCl

RN 60691-12-5 HCAPLUS
CN Isoquinoline, 7-chloro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

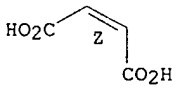
CRN 60691-11-4
CMF C17 H21 Cl N4 S



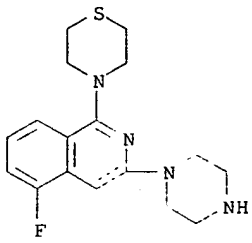
CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.



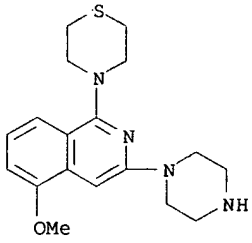
RN 60691-13-6 HCAPLUS
CN Isoquinoline, 5-fluoro-3-(1-piperazinyl)-1-(4-thiomorpholinyl)- (9CI) (CA INDEX NAME)



RN 60691-15-8 HCAPLUS
CN Isoquinoline, 5-methoxy-3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, sulfate (2:1) (9CI) (CA INDEX NAME)

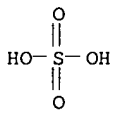
CM 1

CRN 60691-14-7
CMF C18 H24 N4 O S

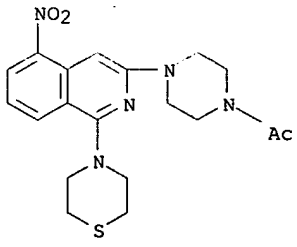


CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 60691-17-0 HCAPLUS
CN Piperazine, 1-acetyl-4-[5-nitro-1-(4-thiomorpholinyl)-3-isoquinolinyl]- (9CI) (CA INDEX NAME)



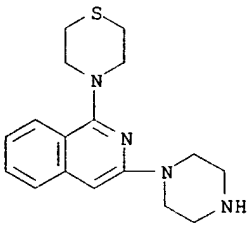
IT **58138-22-0P 58138-25-3P 60691-09-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and platelet aggregation inhibiting activity of)

RN 58138-22-0 HCAPLUS
CN Isoquinoline, 3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

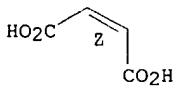
CRN 58138-21-9
CMF C17 H22 N4 S



CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

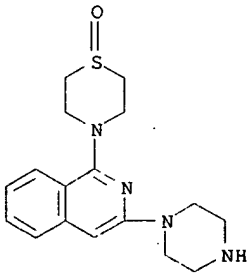
Double bond geometry as shown.



RN 58138-25-3 HCAPLUS
CN Isoquinoline, 1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

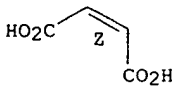
CRN 58138-24-2
CMF C17 H22 N4 O S



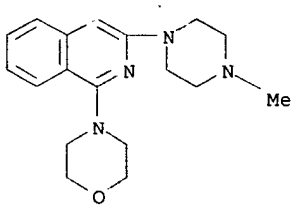
CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

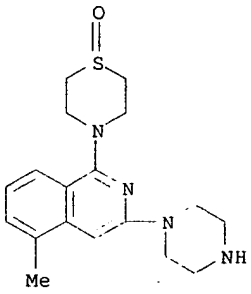
Double bond geometry as shown.



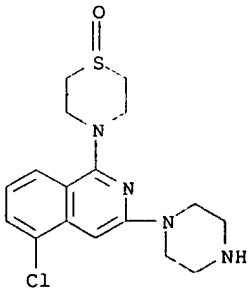
RN 60691-09-0 HCAPLUS
CN Isoquinoline, 3-(4-methyl-1-piperazinyl)-1-(4-morpholinyl)- (9CI) (CA INDEX NAME)



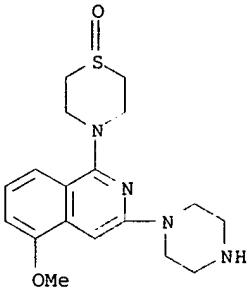
IT **60691-18-1P 60691-19-2P 60691-22-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and platelet aggregation-inhibiting activity of)
RN 60691-18-1 HCAPLUS
CN Isoquinoline, 5-methyl-1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 60691-19-2 HCAPLUS
CN Isoquinoline, 5-chloro-1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)- (9CI) (CA INDEX NAME)

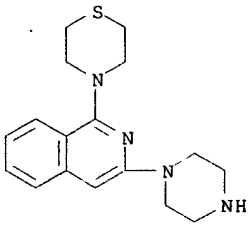


RN 60691-22-7 HCAPLUS
CN Isoquinoline, 5-methoxy-1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



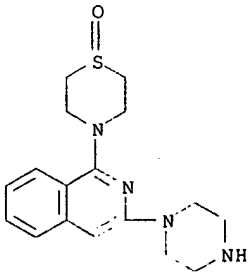
● HCl

IT **58138-23-1P 58138-24-2P 60691-08-9P**
60691-20-5P 60691-21-6P 60691-24-9P
60691-25-0P 60691-26-1P 60691-27-2P
60691-28-3P 60691-29-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 58138-23-1 HCAPLUS
CN Isoquinoline, 3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



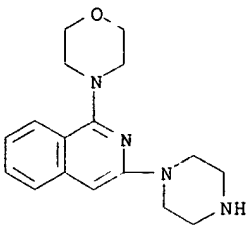
● HCl

RN 58138-24-2 HCAPLUS
CN Isoquinoline, 1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)- (9CI) (CA INDEX NAME)



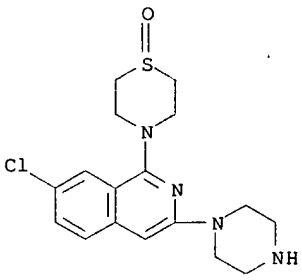
RN 60691-08-9 HCAPLUS
CN Isoquinoline, 1-(4-morpholinyl)-3-(1-piperazinyl)-, monohydrochloride

(9CI) (CA INDEX NAME)

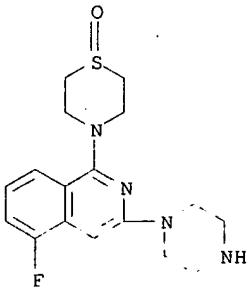


● HCl

RN 60691-20-5 HCAPLUS
CN Isoquinoline, 7-chloro-1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)-
(9CI) (CA INDEX NAME)



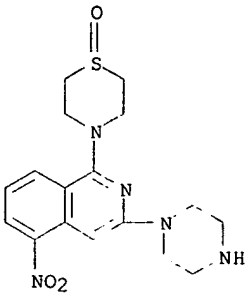
RN 60691-21-6 HCAPLUS
CN Isoquinoline, 5-fluoro-1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)-
(9CI) (CA INDEX NAME)



RN 60691-24-9 HCAPLUS
CN Isoquinoline, 5-nitro-1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)-,
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

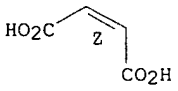
CRN 60691-23-8
CMF C17 H21 N5 O3 S



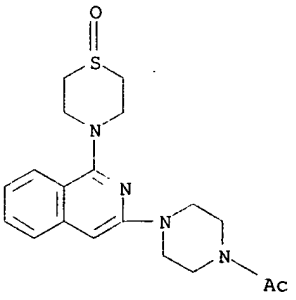
CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

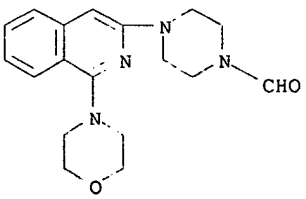
Double bond geometry as shown.



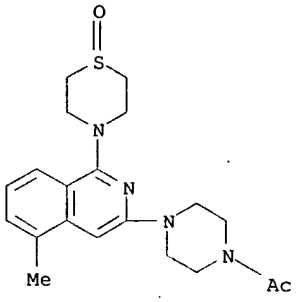
RN 60691-25-0 HCAPLUS
CN Piperazine, 1-acetyl-4-[1-(1-oxido-4-thiomorpholinyl)-3-isoquinolinyl]- (9CI) (CA INDEX NAME)



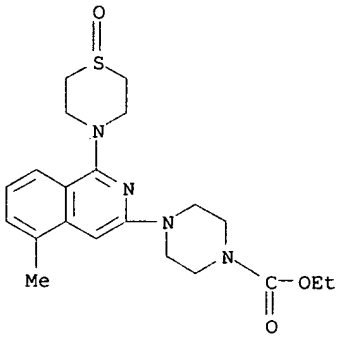
RN 60691-26-1 HCAPLUS
CN 1-Piperazinecarboxaldehyde, 4-[1-(4-morpholinyl)-3-isoquinolinyl]- (9CI) (CA INDEX NAME)



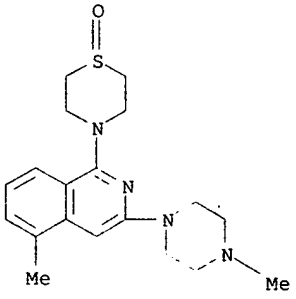
RN 60691-27-2 HCAPLUS
CN Piperazine, 1-acetyl-4-[5-methyl-1-(1-oxido-4-thiomorpholinyl)-3-isoquinolinyl]- (9CI) (CA INDEX NAME)



RN 60691-28-3 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[5-methyl-1-(1-oxido-4-thiomorpholinyl)-3-isoquinolinyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 60691-29-4 HCAPLUS
CN Isoquinoline, 5-methyl-3-(4-methyl-1-piperazinyl)-1-(1-oxido-4-thiomorpholinyl)- (9CI) (CA INDEX NAME)



L30 ANSWER 26 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1976:59571 HCAPLUS
DN 84:59571
TI Isoquinolines
IN Nickl, Josef; Mueller, Erich; Schroeter, Wolfgang; Haarmann, Walter
PA Thomae, Dr. Karl, G.m.b.H., Ger.
SO Ger. Offen., 18 pp.
CODEN: GWXXBX
DT Patent
LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	DE 2420012	A1	19751120	DE 1974-2420012	19740425	<--
	DE 2420012	B2	19790517			
	DE 2420012	C3	19800110			
	AT 7501639	A	19770715	AT 1975-1639	19750304	<--
	NL 7504016	A	19751028	NL 1975-4016	19750404	<--
	ES 436317	A1	19770201	ES 1975-436317	19750404	<--
	FI 7501067	A	19751026	FI 1975-1067	19750409	<--
	FI 61882	B	19820630			
	FI 61882	C	19821011			
	DK 7501579	A	19751026	DK 1975-1579	19750411	<--
	DK 140841	B	19791126			
	DK 140841	C	19800505			
	US 3975524	A	19760817	US 1975-567234	19750411	<--
	SU 557756	D	19770505	SU 1975-2121918	19750411	<--
	DD 119047	C	19760405	DD 1975-185646	19750423	<--
	RO 66020	B	19790815	RO 1975-82052	19750423	<--
	RO 66020	P	19800615			
	CH 613965	A	19791031	CH 1975-5155	19750423	<--
	BE 828355	A1	19751024	BE 1975-155746	19750424	<--
	NO 7501473	A	19751028	NO 1975-1473	19750424	<--
	NO 142403	B	19800505			
	NO 142403	C	19800813			
	JP 50142578	A2	19751117	JP 1975-50160	19750424	<--
	JP 58004020	B4	19830124			
	AU 7580511	A1	19761028	AU 1975-80511	19750424	<--
	ZA 7502649	A	19761229	ZA 1975-2649	19750424	<--
	GB 1466227	A	19770302	GB 1975-17085	19750424	<--
	HU 170231	P	19770428	HU 1975-TO1001	19750424	<--
	PL 93821	P	19770630	PL 1975-179891	19750424	<--
	IL 47155	A1	19780310	IL 1975-47155	19750424	<--
	SE 404926	B	19781106	SE 1975-4779	19750424	<--
	SE 404926	C	19790215			
	CA 1051893	A1	19790403	CA 1975-225579	19750424	<--
	FR 2268524	A1	19751121	FR 1975-13095	19750425	<--
	CS 193512	P	19791031	CS 1975-2918	19750425	<--
	ES 439038	A1	19770201	ES 1975-439038	19750701	<--
PRAI	DE 1974-2420012		19740425			
	DE 1974-2403961		19750131			
	DE 1975-2503961		19750131			

GI For diagram(s), see printed CA Issue.

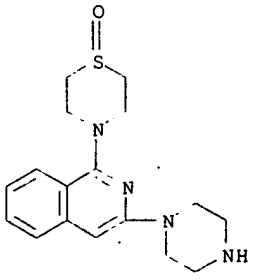
AB Isoquinolines I (n = 0,1) were prepd. by treating 1,3-dichloroisoquinoline with thiomorpholine or its S-oxide and piperazine. I (n = 0) was also oxidized to I (n = 1) with H2O2. At 3 .times. 10-5 mole/l I inhibited thrombocyte aggregration in the thrombocyte stickiness test by 18 and 33% resp.

IT **58138-24-2P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and thrombocyte aggregation inhibiting activity of)

RN 58138-24-2 HCAPLUS

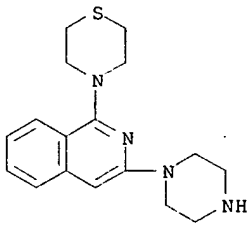
CN Isoquinoline, 1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)- (9CI) (CA INDEX NAME)



IT **58138-22-0P 58138-23-1P 58138-25-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 58138-22-0 HCAPLUS
CN Isoquinoline, 3-(1-piperazinyl)-1-(4-thiomorpholinyl)-,
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

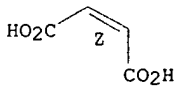
CRN 58138-21-9
CMF C17 H22 N4 S



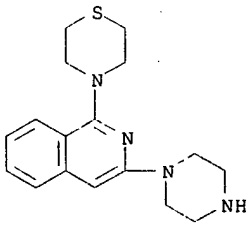
CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.



RN 58138-23-1 HCAPLUS
CN Isoquinoline, 3-(1-piperazinyl)-1-(4-thiomorpholinyl)-, monohydrochloride
(9CI) (CA INDEX NAME)

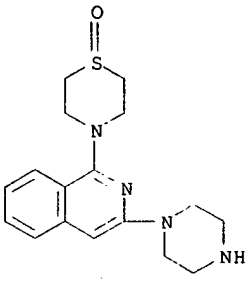


● HCl

RN 58138-25-3 HCAPLUS
CN Isoquinoline, 1-(1-oxido-4-thiomorpholinyl)-3-(1-piperazinyl)-,
(2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

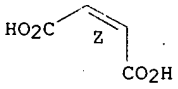
CRN 58138-24-2
CMF C17 H22 N4 O S



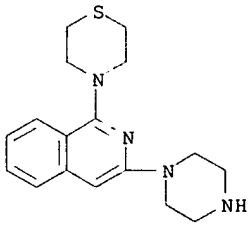
CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.



IT **58138-21-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn., oxidn., and thrombocyte aggregation inhibiting activity of)
RN 58138-21-9 HCAPLUS
CN Isoquinoline, 3-(1-piperazinyl)-1-(4-thiomorpholinyl)- (9CI) (CA INDEX NAME)



L30 ANSWER 27 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1975:16836 HCAPLUS
DN 82:16836
TI Hypolipemic and hypoglycemic 1-(1-imidazolyl)isoquinolines
IN Lerch, Ulrich; Granzer, Ernold
PA Farbwerke Hoechst A.-G.
SO Ger. Offen., 34 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2314985	A1	19741017	DE 1973-2314985	19730326 <--
	ES 424436	A1	19761101	ES 1974-424436	19740320 <--
	GB 1464289	A	19770209	GB 1974-12861	19740322 <--
	ZA 7401917	A	19750326	ZA 1974-1917	19740325 <--
	DD 114607	C	19750812	DD 1974-177438	19740325 <--

	AU 7467098	A1	19750925	AU 1974-67098	19740325 <--
	US 3914236	A	19751021	US 1974-454713	19740325 <--
	HU 168524	P	19760528	HU 1974-HO1659	19740325 <--
	AT 7402452	A	19761015	AT 1974-2452	19740325 <--
	AT 337183	B	19770610		
	BE 812841	A1	19740926	BE 1974-142458	19740326 <--
	FR 2223024	A1	19741025	FR 1974-10396	19740326 <--
	JP 49126684	A2	19741204	JP 1974-33183	19740326 <--
	US 3961062	A	19760601	US 1975-562048	19750326 <--
PRAI	DE 1973-2314985		19730326		
	DE 1973-7314985		19730326		
	US 1974-454713		19740325		

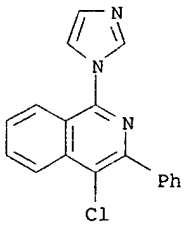
GI For diagram(s), see printed CA Issue.

AB Nineteen imidazolyl-isoquinolines I (R = H, Cl, Ph, or Et; R1 = H, Ph, cyclohexyl, Et, Bu, or Cl; R2, R3, R4 = H, Ph, or Me) and (or) their salts, e.g. hydrochlorides, were prepd. by reaction of the corresponding 1-chloroisoquinolines with the imidazoles in the presence of NaH or KOH or Bu3N in, e.g., (MeOCH2)2 or DMF. I had hypolipemic and hypoglycemic activities in rats and rabbits.

IT **55150-98-6P 55151-06-9P 55151-07-0P**
55151-08-1P 55151-09-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hypoglycemic and hypolipemic activity of)

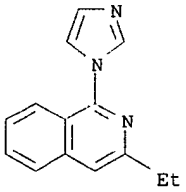
RN 55150-98-6 HCAPLUS

CN Isoquinoline, 4-chloro-1-(1H-imidazol-1-yl)-3-phenyl- (9CI) (CA INDEX NAME)



RN 55151-06-9 HCAPLUS

CN Isoquinoline, 3-ethyl-1-(1H-imidazol-1-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



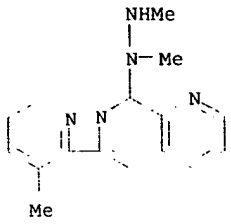
● HCl

RN 55151-07-0 HCAPLUS

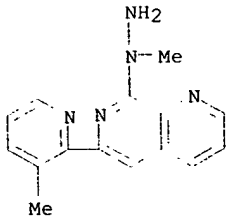
CN Isoquinoline, 4-chloro-3-ethyl-1-(1H-imidazol-1-yl)-, phosphate (9CI) (CA INDEX NAME)

CM 1

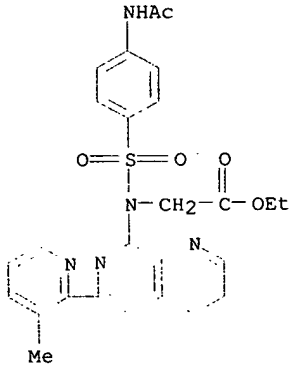
CRN 55150-96-4
CMF C14 H12 Cl N3



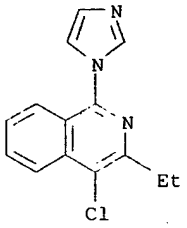
RN 200928-22-9 HCAPLUS
CN 1,7-Naphthyridine, 8-(1-methylhydrazino)-6-(3-methyl-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 200928-24-1 HCAPLUS
CN Glycine, N-[[4-(acetylamino)phenyl]sulfonyl]-N-[6-(3-methyl-2-pyridinyl)-1,7-naphthyridin-8-yl]-, ethyl ester (9CI) (CA INDEX NAME)

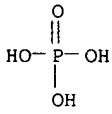


L30 ANSWER 2 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:498744 HCAPLUS
DN 127:190707
TI Synthesis and antitumor activity of 3-arylisoquinoline derivatives
AU Cho, Won-Jea; Yoo, Su-Jeong; Park, Myun-Ji; Chung, Byung-Ho; Lee, Chong-Ock
CS College of Pharmacy, Chonnam National University, Kwangju, 500-757, S. Korea
SO Arch. Pharmacal Res. (1997), 20(3), 264-268
CODEN: APHRDQ; ISSN: 0253-6269
PB Pharmaceutical Society of Korea
DT Journal
LA English
GI



CM 2

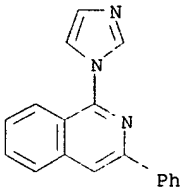
CRN 7664-38-2
CMF H3 O4 P



RN 55151-08-1 HCAPLUS
CN Isoquinoline, 1-(1H-imidazol-1-yl)-3-phenyl-, ethanedioate (9CI) (CA INDEX NAME)

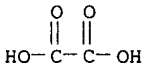
CM 1

CRN 55150-97-5
CMF C18 H13 N3



CM 2

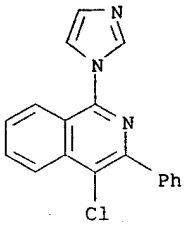
CRN 144-62-7
CMF C2 H2 O4



RN 55151-09-2 HCAPLUS
CN Isoquinoline, 4-chloro-1-(1H-imidazol-1-yl)-3-phenyl-, ethanedioate (9CI) (CA INDEX NAME)

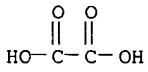
CM 1

CRN 55150-98-6
CMF C18 H12 Cl N3

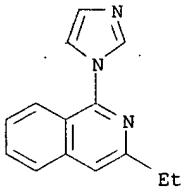


CM 2

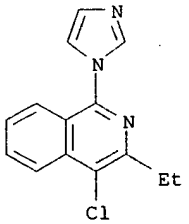
CRN 144-62-7
CMF C2 H2 O4



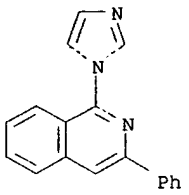
IT **55150-95-3P 55150-96-4P 55150-97-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of hypoglycemic and hypolipemic)
RN 55150-95-3 HCAPLUS
CN Isoquinoline, 3-ethyl-1-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



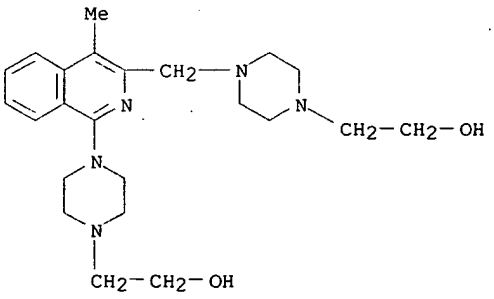
RN 55150-96-4 HCAPLUS
CN Isoquinoline, 4-chloro-3-ethyl-1-(1H-imidazol-1-yl)- (9CI) (CA INDEX NAME)



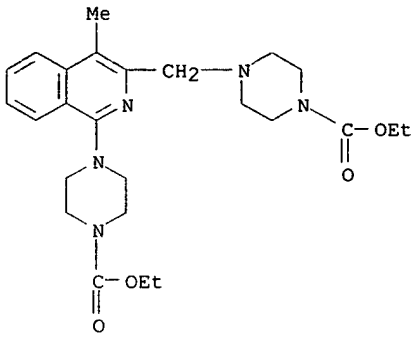
RN 55150-97-5 HCAPLUS
CN Isoquinoline, 1-(1H-imidazol-1-yl)-3-phenyl- (9CI) (CA INDEX NAME)



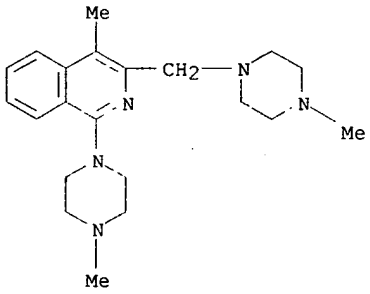
L30 ANSWER 28 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1972:564414 HCAPLUS
DN 77:164414
TI Reactions of 1-chloro-3-chloromethyl-4-methylisoquinoline
AU Nair, M. D.
CS Ciba Res. Cent., Bombay, India
SO Indian J. Chem. (1972), 10(4), 337-40
CODEN: IJOCAP
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB With secondary bases 1-chloro-3-(chloromethyl)-4-methylisoquinoline (I) gave mono or disubstitution products in which the Cl in positions 1 or 3, or both was replaced. In 1-chloro-3-[(2-methylpiperidino)-methyl]-4-methylisoquinoline there was NMR evidence for non-equivalence of benzylic methylene protons from the asymmetry of the 2-Me substituent on piperidine. Reaction of I with piper-azine gave a bis condensation product, II, with NH3 and 4-(.gamma.-aminopropyl)morpholine III and IV were obtained, resp. Nitra-tion of I gave the corresponding 5-NO2 deriv., reaction of which with bases gave mono or disubstituted products, depending on reaction conditions.
IT **14576-16-0P 14576-17-1P 14577-67-4P**
14657-46-6P 14657-48-8P 14657-49-9P
14657-50-2P 14657-51-3P 14657-52-4P
18716-17-1P 37978-50-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 14576-16-0 HCAPLUS
CN 1-Piperazineethanol, 4-[[1-[4-(2-hydroxyethyl)-1-piperazinyl]-4-methyl-3-isoquinolinyl]methyl]- (9CI) (CA INDEX NAME)



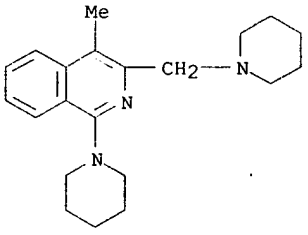
RN 14576-17-1 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[[1-[4-(ethoxycarbonyl)-1-piperazinyl]-4-methyl-3-isoquinolinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



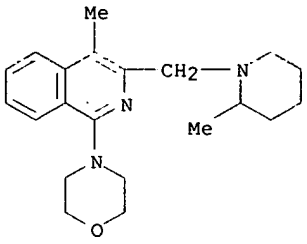
RN 14577-67-4 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-[(4-methyl-1-piperazinyl)methyl]- (8CI, 9CI) (CA INDEX NAME)



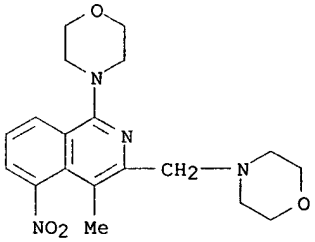
RN 14657-46-6 HCAPLUS
CN Isoquinoline, 4-methyl-1-(1-piperidinyl)-3-(1-piperidinylmethyl)- (9CI) (CA INDEX NAME)



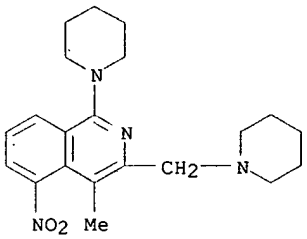
RN 14657-48-8 HCAPLUS
CN Isoquinoline, 4-methyl-3-[(2-methyl-1-piperidinyl)methyl]-1-(4-morpholinyl)- (9CI) (CA INDEX NAME)



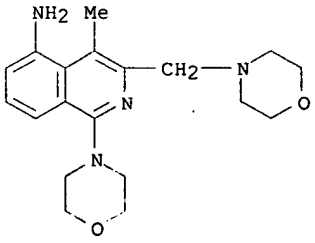
RN 14657-49-9 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-5-nitro-
(9CI) (CA INDEX NAME)



RN 14657-50-2 HCAPLUS
CN Isoquinoline, 4-methyl-5-nitro-1-(1-piperidinyl)-3-(1-piperidinylmethyl)-
(9CI) (CA INDEX NAME)

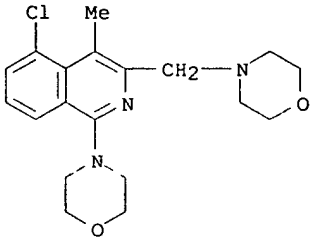


RN 14657-51-3 HCAPLUS
CN 5-Isoquinolinamine, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-
(9CI) (CA INDEX NAME)



RN 14657-52-4 HCAPLUS
CN Isoquinoline, 5-chloro-4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-

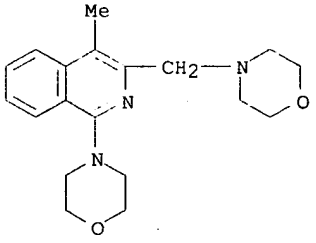
(9CI) (CA INDEX NAME)



RN 18716-17-1 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

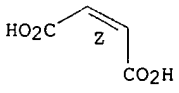
CRN 18704-39-7
CMF C19 H25 N3 O2



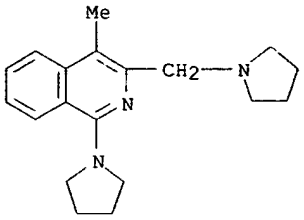
CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.

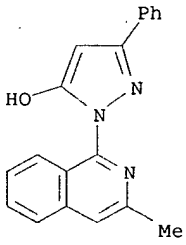


RN 37978-50-0 HCAPLUS
CN Isoquinoline, 4-methyl-1-(1-pyrrolidinyl)-3-(1-pyrrolidinylmethyl)-, trihydrochloride (9CI) (CA INDEX NAME)



●3 HCl

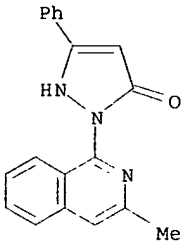
L30 ANSWER 29 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1971:544847 HCAPLUS
DN 75:144847
TI Crystal structure of 5-hydroxy-3-phenyl-1-(3-methyl-1-isoquinolyl)pyrazole
AU King, Geoffrey S. D.; Reimlinger, Hans
CS Union Carbide Eur. Res. Assoc., Brussels, Belg.
SO Chem. Ber. (**1971**), 104(9), 2694-701
CODEN: CHBEAM
DT Journal
LA German
AB An x-ray crystal structure detn. of the title compd. (I) proved that I is the product of the reaction of PhC.tplbond.CCO2Me with 1-hydrazino-3-methylisoquinoline. I crystd. orthorhombic with a 43.26, b 12.626, c 5.546 .ANG., d.(exptl.) 1.32, d.(calcd.) 1.321, and space group P212121, and the asym. unit contained 2 independent mols.
IT **34274-79-8**
RL: PRP (Properties)
(crystal structure of)
RN 34274-79-8 HCAPLUS
CN Pyrazol-5-ol, 1-(3-methyl-1-isoquinolyl)-3-phenyl- (8CI) (CA INDEX NAME)



L30 ANSWER 30 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1970:425363 HCAPLUS
DN 73:25363
TI Condensed isoquinolines. I. Syntheses of s-triazolo[3,4-a]isoquinolines
AU Reimlinger, Hans; Vandewalle, Jan J. M.; Lingier, Willy R. F.
CS Union Carbide European Res. Assoc., Brussels, Belg.
SO Chem. Ber. (**1970**), 103(6), 1960-81
CODEN: CHBEAM
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB Hexasubstituted s-triazolo[3,4-a]isoquinolines(I) [where R = H, Me, CH2CO2Et, CH2NHBz, CH2CH2Cl, CO2Et, CF3, CH2CH2NHBz, o-ClC6H4, Et, CH2CH2CO2H, Ph, HC:CPh, CH:CHPh.HCl, 3-indolylmethyl, CH2C6H3(OMe)2-3,4, n-C17H35, CH2CONHEt, CH2CONHMe, CH2CONMe2, CH2CH2OH, CH2CO2H, CHPh2, NHPh, cyclohexylamino, 1-pyridyl, or 4-pyridyl; R1 = H or Cl; R2, R4 = H or MeO;

R3 = H or NO2; and R5 = H, Cl, or OMe] were prepd. by 1 or more of several methods: (a) by reaction of 1,4-dichloroisoquinoline (II) with N2H4 and RCO2Bu, (b) treatment of 1-hydrazinoisoquinoline with RCOCl, (c) reaction of II with NH2NHCOR, or (d) treatment of 1-[2-(RCO-substituted)hydrazino]isoquinoline with SOCl2. Reaction of 1-hydrazino-3,4-(RR1-disubstituted)isoquinolines (III) with Cl2C:X yielded disubstituted 1,2-dihydro-s-triazolo[3,4-a]isoquinolines (IV) (where R = H, Cl, or Me, R1 = H or Cl, and X = O, S, NH, or NBz).

IT **27319-97-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 27319-97-7 HCAPLUS
CN 3-Pyrazolin-5-one, 1-(3-methyl-1-isoquinolyl)-3-phenyl- (8CI) (CA INDEX NAME)



L30 ANSWER 31 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1968:435972 HCAPLUS
DN 69:35972
TI 4-Methylisoquinolines
IN Aebi, Albert; Nair, Mohan D.; Bucher, Karl
PA CIBA Ltd.
SO Swiss, 6 pp.
CODEN: SWXXAS
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CH 438308		19671215	CH	19630221 <--

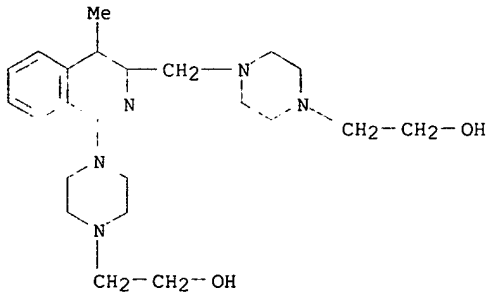
GI For diagram(s), see printed CA Issue.

AB The title compds. are prepd. by treating 1-chloro-3-chloromethyl-4-methylisoquinoline (I) or its substituted derivs. with secondary amines. Thus, 1.55 g. I and 5 ml. morpholine was heated overnight in a pressure vessel at 150.degree.. The cryst. suspension was then evapd. to dryness, taken up in CHCl3, extd. 2 times with dil. aq. HCl, and the aq. exts. adjusted to pH 8-9 with NaOH. The oil which sepd. gradually crystd., and was sepd. and recrystd. from iso-PrOH to give II (R = H and R1 = morpholino), m. 100.degree.; dihydrochloride m. 229-32.degree. (decompn.) and maleate m. 173-5.degree.. Other II similarly prepd. are shown in the table. The starting material for II (R = NO2) was prepd. by treating I with concd. H2SO4 and fuming HNO3 to give II (R = NO2, R1 = Cl), m. 104-5.degree.. A mixt. of 4 g. 1,7-dichloro-3-chloromethyl-4-methylisoquinoline (IV) and 50 ml. morpholine was refluxed 4 hrs., and excess morpholine was then removed under reduced pressure. [TABLE OMITTED] The residue was treated with aq. Na2CO3 until alk. and extd. with CHCl3. The exts. were evapd. to give 7-chloro-4-methyl-1-morpholino-3-(morpholinomethyl)isoquinoline, which was purified by conversion to its maleate and then to the free base, m. 120.degree. (EtOH). IV was prepd. by treating 4,4-dimethylhomophthalimide with fuming HNO3 and concd. H2SO4 at -10.degree. to give 4,4-dimethyl-7-nitrohomophthalimide, m. 209-11.degree.. Hydrogenation over Pd-C gave the 7-amino compd., m. 176-9.degree., which was diazotized and treated with CuCl to give the 7-chloro deriv., m. 200.degree.. Treatment with POCl3 gave IV, m. 135.degree.. These compds. are used in pharmaceutical applications.

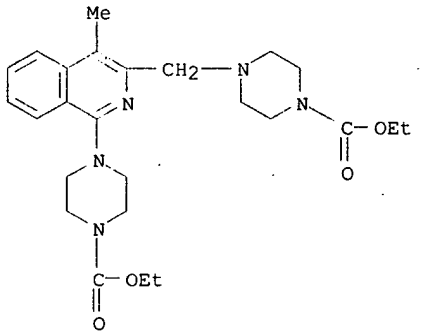
IT **14576-16-0P 14576-17-1P 14577-67-4P**

14657-46-6P 14657-49-9P 14657-50-2P
14657-51-3P 14657-52-4P 14825-52-6P
18704-39-7P 18704-40-0P 18704-43-3P
18716-17-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

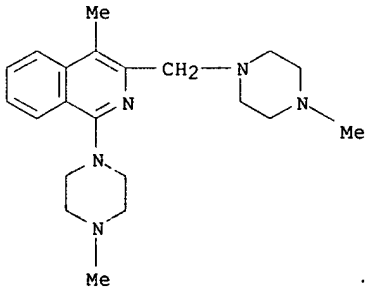
RN 14576-16-0 HCAPLUS
CN 1-Piperazineethanol, 4-[[1-[4-(2-hydroxyethyl)-1-piperazinyl]-4-methyl-3-isoquinolinyl]methyl]- (9CI) (CA INDEX NAME)



RN 14576-17-1 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[[1-[4-(ethoxycarbonyl)-1-piperazinyl]-4-methyl-3-isoquinolinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

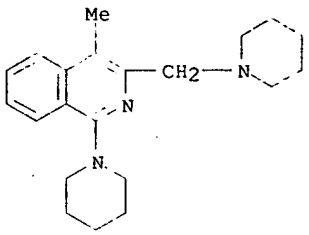


RN 14577-67-4 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-[(4-methyl-1-piperazinyl)methyl]- (8CI, 9CI) (CA INDEX NAME)

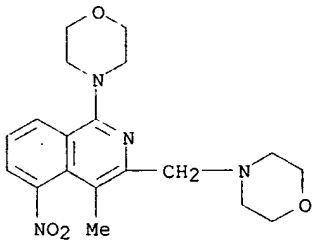


RN 14657-46-6 HCAPLUS
CN Isoquinoline, 4-methyl-1-(1-piperidinyl)-3-(1-piperidinylmethyl)- (9CI)

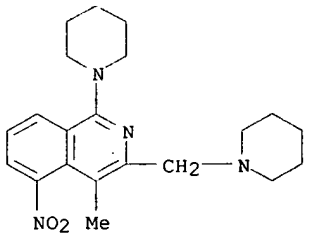
(CA INDEX NAME)



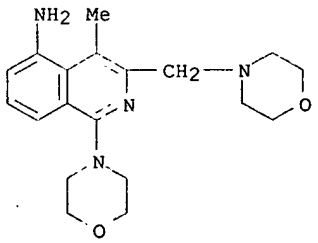
RN 14657-49-9 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-5-nitro- (9CI) (CA INDEX NAME)



RN 14657-50-2 HCAPLUS
CN Isoquinoline, 4-methyl-5-nitro-1-(1-piperidinyl)-3-(1-piperidinylmethyl)- (9CI) (CA INDEX NAME)

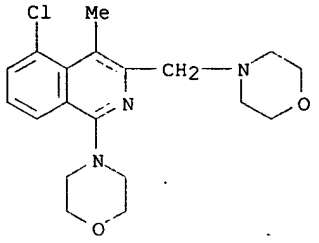


RN 14657-51-3 HCAPLUS
CN 5-Isoquinolinamine, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)- (9CI) (CA INDEX NAME)

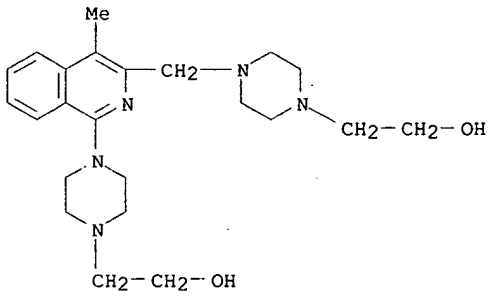


RN 14657-52-4 HCAPLUS

CN Isoquinoline, 5-chloro-4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-
(9CI) (CA INDEX NAME)

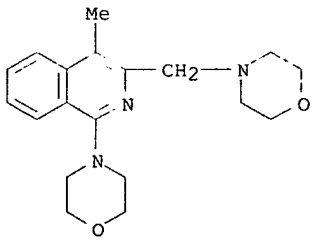


RN 14825-52-6 HCAPLUS
CN 1-Piperazineethanol, 4,4'-[methylene(4-methyl-3,1-isoquinolinediyl)]di-,
hydrochloride (8CI) (CA INDEX NAME)

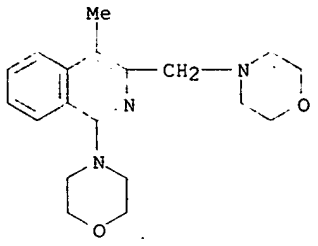


●x HCl

RN 18704-39-7 HCAPLUS
CN Isoquinoline, 4-methyl-1-morpholino-3-(morpholinomethyl)- (8CI) (CA INDEX
NAME)

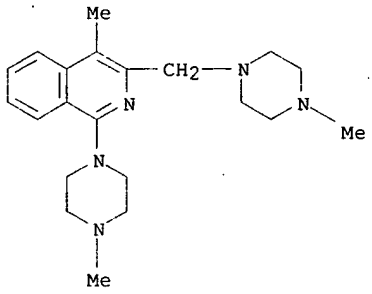


RN 18704-40-0 HCAPLUS
CN Isoquinoline, 4-methyl-1-morpholino-3-(morpholinomethyl)-, dihydrochloride
(8CI) (CA INDEX NAME)



●2 HCl

RN 18704-43-3 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-[(4-methyl-1-piperazinyl)methyl]-, monohydrochloride (8CI) (CA INDEX NAME)

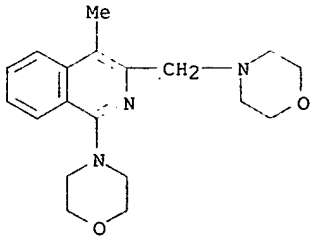


● HCl

RN 18716-17-1 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 18704-39-7
CMF C19 H25 N3 O2

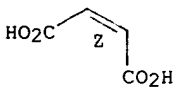


CM 2

CRN 110-16-7
CMF C4 H4 O4

CDES 2:Z

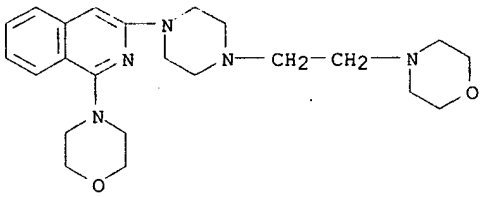
Double bond geometry as shown.



L30 ANSWER 32 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1968:418996 HCAPLUS
DN 69:18996
TI 3-Chloroisocarbostyril and its chlorination products
AU Nair, M. D.; Mehta, S. R.
CS CIBA Res. Centre, Goregaon, India
SO Indian J. Chem. (**1967**), 5(10), 467-70
CODEN: IJOCAP
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB A mixt. of 10 g. dried homophthalimide (I) and 24 ml. POCl3 was refluxed 14 hrs. (anhyd. conditions) at 170.degree., the soln. cooled and EtOH added to yield 8 g. 3-chlorocarbostyril (II), m. 219-20.degree. (EtOH). Methylation of I with MeI and alc. KOH soln. yielded 2-methyl-3-chloroisocarbostyril (III), m. 109-10.degree. (EtOH). III was also prepd. by heating 1 hr. 15 g. N-methylhomophthalimide, 30 ml. POCl3, and 1 ml. H2O at 170.degree. (oil-bath) and working up of the reaction mixt. A mixt. of 60 g. homophthalic acid and 100 ml. iso-PrNH2 and 20 ml. H2O was evapd. to dryness in vacuo, the residue mixed with 150 ml. o-Cl2C6H4 and heated overnight at 170.degree. to yield 52 g. N-isopropylhomophthalimide (IV), m. 88-9.degree. (EtOH). A mixt. of 8 g. IV, 24 ml. POCl3, and 1 ml. concd. HCl was heated 1 hr. at 170.degree. to yield 4 g. 1,3-dichloroisoquinoline, m. 121-2.degree.. II was treated with a no. of amines to give 3-aminoisocarbostyrils (V). Thus, II was mixed with approx. 5 times its wt. of secondary amine, and the mixt. heated 8 hrs. at 150.degree. in a bomb tube to yield the following V (R = H) (R1, % yield, and m.p. given): morpholino, 39, 212.degree. (CHCl3-petroleum ether); pyrrolidino, 58, 238-41.degree. (decompn.); piperidino, 51.5, 195-7.degree. (CHCl3-petroleum ether); N-methylpiperazino, 47, 212.degree.; hexamethylenimino, 59.5, 177-9.degree.; N-carbethoxypiperazino, 44.7, 196-7.degree.; 4-methylpiperidino, 55.7, 230-2.degree.; tetrahydroisoquinolino, 54.5, 217-18.degree.; N-(.beta.-hydroxyethyl)-piperazino (Va), 37.5, 205-7.degree.. Also prepd. was 19.8% V (R = Me, R1 = morpholino), m. 131-2.degree.. A mixt. of 2 g. 3-[N4-(.beta.-hydroxyethyl)piperazino]isocarbostyril (Va) and 10 ml. POCl3 was refluxed 3 hrs. to yield 2.4 g. 1-chloro-3-[N4-(.beta.-chloroethyl)-piperazino]isoquinoline (VI) HCl salt, m. 300.degree. (EtOH-ether). VI (3.2 g.) on refluxing 18 hrs. with 15 ml. morpholine yielded 1-morpholino-3-[N4-(.beta.-morpholinoethyl)piperazinol]isoquinoline, m. 145-6.degree. (dil. EtOH). A mixt. of 12 g. I, 90 ml. Ac2O and 90 ml. HC(OEt)3 was refluxed 7 hrs. and the soln. cooled to yield 13 g. .alpha.-ethoxymethylenehomophthalimide (VII), m. 236-9.degree. (dil. MeOH). Hydrogenation of 5 g. VII in 200 ml. EtOH in the presence of 0.2 g. platinum oxide at atm. pressure yielded 3.4 g. .alpha.-methylhomophthalimide, m. 140-2.degree. (dil. EtOH). H2O2 (1 ml., 30%) was added to a soln. of 1.5 g. III in 6 ml. HOAc, after the exothermic reaction had subsided, 1 ml. concd. HCl added dropwise, the mixt. kept 1 hr. and treated with ice water to yield 1.5 g. 2-methyl-3,4-dichlorohomophthalimide (VIII), m. 137-8.degree. (EtOH). The structure of VIII was confirmed by N.M.R. spectra. A mixt. of 3 g. 3-chloro-N-methyl-homophthalimide (IX), 30 ml. dioxane and 8.4 ml. concd. HCl was heated at 85.degree. (oil-bath), treated dropwise with 9 ml. H2O2, and cooled to yield 3.7 g. .alpha.,.alpha.-dichloro-N-methyl-homophthalimide, m. 149-51.degree. (dil. EtOH). Use of 1 g. 3,4-dichloro-N-methylisocarbostyril in place of IX as above yielded 1 g. .alpha.,.alpha.-dichloro-N-methylhomophthalimide, m. 149-50.degree.. Similarly, chlorination of 10 g. I yielded 13.6 g. .alpha.,.alpha.-dichlorohomophthalimide (X), m. 164-8.degree. (dil. EtOH). The reaction

of X with substituted anilines (1 hr. reflux) yielded the corresponding phthalonimide anils (XI). The following XI were prepd. (R, R1, m.p., and % yield given): H, 4-diethylaminophenyl, 195-6.degree. (C6H6-hexane), 64.3; H, 4-methoxyphenyl, 204-7.degree. (C6H6-hexane), 89.3; H, 4-chlorophenyl, 267-9.degree. (C6H6-hexane), 91.2; Me, NH2, 160-2.degree. (HOAc-H2O), 94.0; Me, NHPh, 176-7.degree. (EtOH-H2O), 71.5. X and XI reacted with o-phenylenediamine (45 hrs. reflux in C6H6) to yield, resp., quinoxalinoisocarbostyrils (XIIa), m. 265.degree. (HOAc) and XIIb, 203-5.degree. (HOAc). Secondary bases like morpholine reacted with X to give iminium salts (XIII), which were very hygroscopic and on catalytic hydrogenation led to hydrogenolytic cleavage to yield homophthalimides, while redn. with NaBH4 gave rise to water-sol. compds., from which no definite product could be isolated.

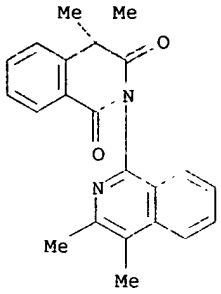
IT **18630-91-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 18630-91-6 HCAPLUS
CN Isoquinoline, 1-morpholino-3-[4-(2-morpholinoethyl)-1-piperazinyl]- (8CI) (CA INDEX NAME)



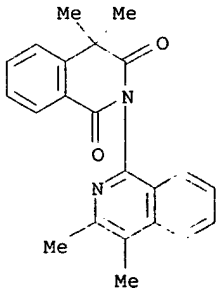
L30 ANSWER 33 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1968:410341 HCAPLUS
DN 69:10341
TI Synthesis of biologically interesting isoquinolines
AU Nair, Mohann D.
CS Ciba Res. Centre, Bombay, India
SO Symp. Syn. Heterocycl. Compounds Physiol. Interest, Hyderabad, India, 1964 (**1966**), Meeting Date 1964, 107-13
CODEN: 16VOA6
DT Conference
LA English
GI For diagram(s), see printed CA Issue.
AB The Gabriel rearrangement of 4,4-dimethylhomophthalimide with POCl3 gave as the major product 1-chloro-3-chloromethyl-4-methylisoquinoline (I), and as byproducts, 1-chloro-3-methyl-4-chloromethylisoquinoline, 1-chloro-3,4-dimethylisoquinoline, .alpha.-chloromethylhomophthalimide, and N-(3,4-dimethyl-1-isoquinolyl)-4,4-dimethylhomophthalimide. Nitration of I gave a 5-nitro deriv., which readily reacted with primary and secondary amines. An optimum yield of 62% in the rearrangement was obtained by adding a small amt. of water to the reaction mixt. prior to heating to 200.degree.. Rearrangement of the corresponding 4,4-diethyl- and 4,4-dipropylhomophthalimides gave 1-chloro-3-(.beta.-chloroethyl)-4-ethylisoquinoline and 1-chloro-3-(2-chloropropyl)-4-propylisoquinoline, resp. 4-Alkyl-4-benzylhomophthalimides were prepd. by hydrogenating 4-benzylidenehomophthalimide over PtO2, and then treating with an alkyl iodide. The 4-Me, 4-Et, and 4-Pr derivs. obtained were treated with POCl3, giving C-debenzylation in all cases. The 4-Me compd. gave 1,3-dichloro-4-methylisoquinoline, while the 4-Et and 4-Pr derivs. gave isocarbostyril derivs. Some of the compds. showed borderline biol. activities. The most active was 4-methyl-1-morpholino-3-(morpholinomethyl)-isoquinoline, which showed high antitussive activity and was well tolerated.

IT **15896-93-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 15896-93-2 HCAPLUS
CN 1,3(2H,4H)-Isoquinolinedione, 2-(3,4-dimethyl-1-isoquinolyl)-4,4-dimethyl-

- (8CI) - (CA INDEX NAME)



L30 ANSWER 34 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1967:482075 HCAPLUS
DN 67:82075
TI Isoquinolines. I. Rearrangement of .alpha.,.alpha.-dialkyl-homophthalimides to 1-chloro-3,4-dialkylisoquinoline derivatives
AU Marquardt, Fritz H.; Nair, Mohann D.
CS CIBA, Goregaon, India
SO Helv. Chim. Acta (**1967**), 50(6), 1469-76
CODEN: HCACAV
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB On reinvestigation of the reaction of wet POCl3 with .alpha.,.alpha.-dimethylhomophthalimide, 1-chloro-3-chloromethyl-4-methylisoquinoline (I) and 1-chloromethyl-3-methylisoquinoline were isolated as the main products (aside from some substances resulting from a redox disproportionation). The production of these two substances can be rationalized by assuming a mechanism in which the rarrangement product is a protonated deriv. of 3,4-dimethylene-3,4-dihydroisoquinoline. With .alpha.,.alpha.-diethylhomophthalimide, the only isolated product was a deriv. of 1-chloro-3,4-diethylisoquinoline, with a Cl atom in .beta.-position to one of the Et groups, while with .alpha.-methyl-.alpha.-benzylhomophthalimide, the isolated product was 1,3-dichloro-4-methylisoquinoline, i.e. elimination occurred instead of rearrangement. Also these results are in agreement with the proposed mechanism.
IT **15896-93-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 15896-93-2 HCAPLUS
CN 1,3(2H,4H)-Isoquinolinedione, 2-(3,4-dimethyl-1-isoquinolyl)-4,4-dimethyl- (8CI) (CA INDEX NAME)



L30 ANSWER 35 OF 35 HCAPLUS COPYRIGHT 2001 ACS
AN 1967:421848 HCAPLUS

DN 67:21848
TI New antitussive isoquinoline derivatives
PA CIBA Ltd.
SO Fr. M., 10 pp.
CODEN: FMXXAJ
DT Patent
LA French
FAN.CNT 1

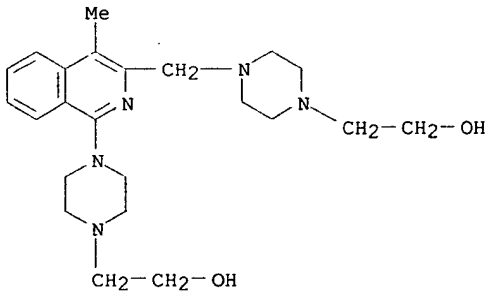
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	FR 3782		19660131			<--
PRAI	CH		19630121			
	CH		19640121			

GI For diagram(s), see printed CA Issue.
AB New antitussive isoquinoline derivs. with general formula (I) are prepd. A mixt. of 9 g. 1-chloro-3-chloromethyl-4-methylisoquinoline (II) and 40 cc. piperidine (III) is heated in a sealed tube 8 hrs. at 150.degree., the reaction mixt. concd. in vacuo, treated with water, and extd. with CH2Cl2, the ext. dried and evapd. to dryness, and the residue in CHCl3 passed through activated alumina to give 4-methyl-1-piperidino-3-piperidinomethylisoquinoline, m. 111.degree. (water-EtOH). The following products are prepd. in a similar way (starting materials, reaction time, reaction temp., final product, m.p., derivs., and m.p. given): II (9 g.), pyrrolidine (40 cc.), 8 hrs., 150.degree., 4-methyl-1-(1-pyrrolidinyl)-3-(1-pyrrolidinylmethyl)isoquinoline, -, hydrochloride, 239.degree.; II (8 g.), N-methylpiperazine (IV) (50 cc.), 8 hrs., 150.degree., 4-methyl-1-(N'-methylpiperazino)-3-(N'-methylpiperazinomethyl)isoquinoline, 110-11.degree., hydrochloride, 238.degree.; II (8 g.), N-(.beta.-hydroxyethyl)piperazine (40 cc.), 8 hrs., 150.degree., 4-methyl-1-[N'-(.beta.-hydroxyethyl)piperazino]-3-[N'-(.beta.-hydroxyethyl)piperazinomethyl]isoquinoline, 112.degree., hydrochloride, 262.degree. (decompn.); II (6 g.), Et2NH (15 cc.), 8 hrs., 150.degree., 4-methyl-1-diethylamino-3-diethylaminomethylisoquinoline, -, dimaleate, 109-11.degree.; II (4.5 g.), ethanolamine (15 cc.), 3 hrs., 130.degree., 4-methyl-1-(.beta.-hydroxyethylamino)-3-(.beta.-hydroxyethylaminomethyl)isoquinoline, -, hydrochloride, 252-4.degree.; II (5 g.), N-carbethoxypiperazine (V) (20 cc.), 6 hrs., 140.degree., 4-methyl-1-(N'-carbethoxypiperazino)-3-(N'-carbethoxypiperazinomethyl)isoquinoline, 90-2.degree., -, -; II (5 g.), 2-methylpiperidine (20 cc.), 6 hrs., 140.degree., 1-chloro-4-methyl-3-(2-methylpiperidinomethyl)isoquinoline (VI), 106-8.degree., -, -; VI (6 g.), morpholine (VII) (20 cc.), 14 hrs., 170.degree., 4-methyl-1-morpholino-3-(2-methylpiperidinomethyl)isoquinoline, 103-4.degree., -, -; 1-chloro-3-chloromethyl-4-methyl-5-nitroisoquinoline (VIII) (2 g.), VII (10 cc.), 2 hrs., 120.degree., 4-methyl-1-morpholino-3-morpholinomethyl-5-nitroisoquinoline (IX), 145-6.degree., -, -; VIII (2.5 g.), III (10 cc.), 2.5 hrs., 80.degree., 4-methyl-5-nitro-1-piperidino-3-piperidinomethylisoquinoline, 104-6.degree., -, -; VIII (2.5 g.), p-anisidine (4.55 g.), EtOH (80 cc.), 4 hrs., reflux, 1-p-anisidino-3-p-anisidinomethyl-4-methyl-5-nitroisoquinoline, 183-5.degree., -, -; 1,7-dichloro-3-chloromethyl-4-methylisoquinoline (X) (4 g.), VII (50 cc.), 4 hrs., reflux, 7-chloro-4-methyl-1-morpholino-3-morpholinomethylisoquinoline, 120.degree., maleate, -; VIII (5 g.), III (8 cc.), EtOH (75 cc.), 1 hr., reflux, 1-chloro-4-methyl-5-nitro-3-piperidinomethylisoquinoline, 67-79.degree., -, -; II (4.5 g.), III (15 cc.), 2 hrs., 80.degree., 1-chloro-4-methyl-3-piperidinomethylisoquinoline, 79-80.degree., -, -; VIII (3.5 g.), IV (2.58 g.), EtOH (100 cc.), 2 hrs., reflux, 1-chloro-3-(N'-methylpiperazinomethyl)-4-methyl-5-nitroisoquinoline, 173-5.degree., -, -; VIII (4 g.), V (10 cc.), EtOH (75 cc.), 1 hr., reflux, 1-chloro-3-(N'-carbethoxypiperazinomethyl)-4-methyl-5-nitroisoquinoline, 127-8.degree., -, -; VIII (2.71 g.), diethanolamine (4.5 g.), dioxane (50 cc.), 3 hrs., reflux, 1-chloro-3-[bis(.beta.-hydroxyethyl)aminomethyl]-4-methyl-5-nitroisoquinoline, 110-12.degree., -, -; II (5.0 g.), 4-methylpiperidine (5.5 cc.), 2 hrs., 80.degree., 1-chloro-3-(4-methylpiperidinomethyl)-4-methylisoquinoline, 83-5.degree., -, -; II (5.0 g.), concd. aq. NH3 (80 cc.), hydrated CuSO4 (1.0 g.), 30 hrs., 140.degree., bis(1-chloro-4-methyl-3-isoquinolylmethyl)amine, 131-2.degree., -, -; II (5.0 g.), N-(.gamma.-aminopropyl)morpholine (6.5 g.), 2 hrs., 100.degree., N,N-bis(1-chloro-4-methyl-3-isoquinolylmethyl)-N-

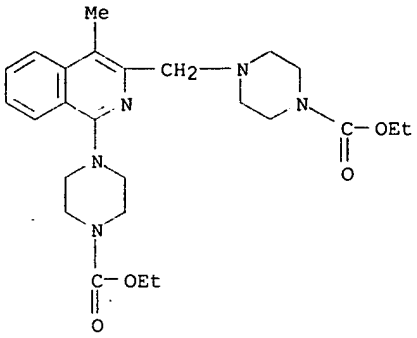
(.gamma.-morpholinopropyl)amine, 110-12.degree., -, -. Some starting materials and other products are prepd. as follows: II (6 g.) is added slowly with stirring to a cooled mixt. of 15 cc. concd. H2SO4 and 15 cc. fuming HNO3 and the mixt. stirred 1.5 hrs. below 5.degree. and poured over a mixt. of ice and water to ppt. VIII, m 104-5.degree. (EtOH). A mixt. of 4 g. IX, 0.3 g. Pd-C and 150 cc. 95% EtOH is hydrogenated 1.5 hrs. to give 5-amino-4-methyl-1-morpholino-3-morpholinomethylisoquinoline (XI), m. 134-5.degree. (EtOH). A soln. of 1.6 g. NaNO2 in 5 cc. water is added slowly to a cooled soln. of 8 g. XI in 6 cc. concd. HCl and 6 cc. water, the resulting soln. poured into a cooled soln. of Cu2Cl2 (prepd. from 8 g. CuSO4) and then is heated at 60.degree., and the ppt. suspended in 25 cc. water, alkalinized, and extd. with CHCl3 to give 5-chloro-4-methyl-1-morpholino-3-morpholinomethylisoquinoline, m. 104.degree.. 4,4-Dimethylhomophthalimide (15 g.) is added slowly with stirring to a cooled (-10.degree.) mixt. of 30 cc. concd. H2SO4 and 30 cc. fuming HNO3 and the mixt. stirred 1 hr. below 20.degree. and poured over a mixt. of ice and water to ppt. 4,4-dimethyl-7-nitrohomophthalimide (XII), m. 209-11.degree. (EtOH). A mixt. of 23.4 g. XII, 0.5 g. Pd-C, and 200 cc. MeOH is hydrogenated at 50.degree./3.4 atm. .apprx.1.5 hrs. to give 4,4-dimethyl-7-aminohomophthalimide (XIII), m. 176-9.degree. (MeOH). Concd. H2SO4 (26 g.) is added slowly to a mixt. of 20 g. XIII and 90 cc. water, and cooled at 0.degree., 8.4 g. NaNO2 in 24 cc. water added slowly to it, and this mixt. is added slowly to a soln. of Cu2Cl2 (prepd. from 33.4 g. CuSO4), and the mixt. heated at 60.degree. 30 min., cooled, dild. with water, and extd. with CHCl3 to give 4,4-dimethyl-7-chlorohomophthalimide (XIV), m. 200.degree. (EtOH). A mixt. of 10 g. XIV, 0.5 cc. water, and 40 cc. POCl3 is heated in a sealed tube at 200.degree. 5 hrs. to give X, m. 135.degree. (hexane-CHCl3). Some recipes for the prepn. of pharmacol. compns. are also given.

IT **14576-16-0P 14576-17-1P 14577-67-4P**
14601-03-7P 14601-04-8P 14601-07-1P
14657-46-6P 14657-48-8P 14657-49-9P
14657-50-2P 14657-51-3P 14657-52-4P
14825-52-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

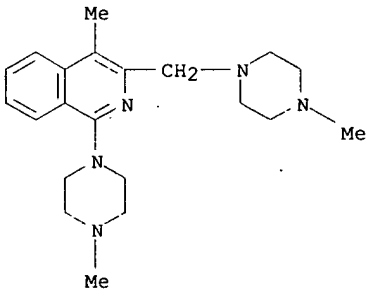
RN 14576-16-0 HCAPLUS
CN 1-Piperazineethanol, 4-[[1-[4-(2-hydroxyethyl)-1-piperazinyl]-4-methyl-3-isoquinolinyl]methyl]- (9CI) (CA INDEX NAME)



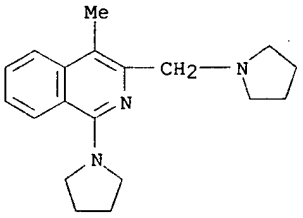
RN 14576-17-1 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[[1-[4-(ethoxycarbonyl)-1-piperazinyl]-4-methyl-3-isoquinolinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 14577-67-4 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-[(4-methyl-1-piperazinyl)methyl]- (8CI, 9CI) (CA INDEX NAME)

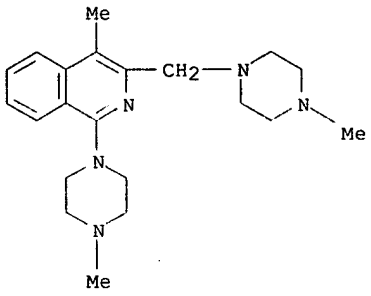


RN 14601-03-7 HCAPLUS
CN Isoquinoline, 4-methyl-1-(1-pyrrolidinyl)-3-(1-pyrrolidinylmethyl)-, hydrochloride (8CI) (CA INDEX NAME)



●x HCl

RN 14601-04-8 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-methyl-1-piperazinyl)-3-[(4-methyl-1-piperazinyl)methyl]-, hydrochloride (8CI) (CA INDEX NAME)

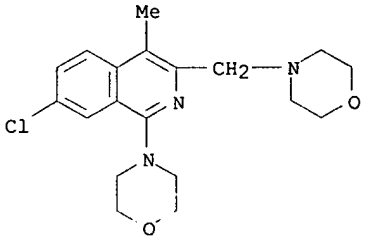


●x HCl

RN 14601-07-1 HCAPLUS
CN Isoquinoline, 7-chloro-4-methyl-1-morpholino-3-(morpholinomethyl)-, maleate (8CI) (CA INDEX NAME)

CM 1

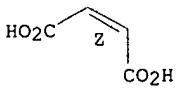
CRN 47438-17-5
CMF C19 H24 Cl N3 O2



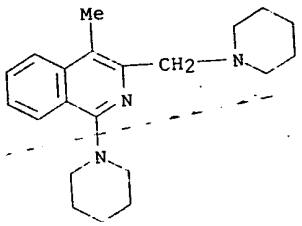
CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

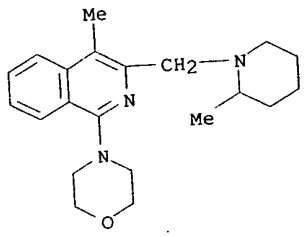
Double bond geometry as shown.



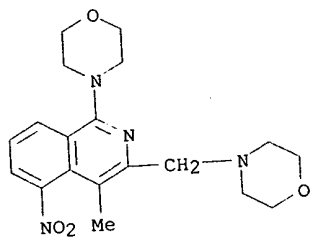
RN 14657-46-6 HCAPLUS
CN Isoquinoline, 4-methyl-1-(1-piperidinyl)-3-(1-piperidinylmethyl)- (9CI) (CA INDEX NAME)



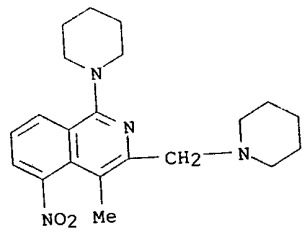
RN 14657-48-8 HCAPLUS
CN Isoquinoline, 4-methyl-3-[(2-methyl-1-piperidinyl)methyl]-1-(4-morpholinyl)- (9CI) (CA INDEX NAME)



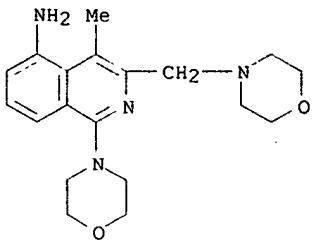
RN 14657-49-9 HCAPLUS
CN Isoquinoline, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-5-nitro- (9CI) (CA INDEX NAME)



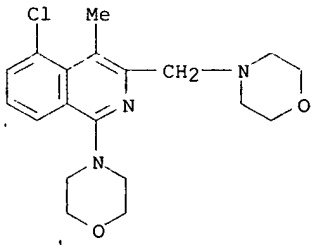
RN 14657-50-2 HCAPLUS
CN Isoquinoline, 4-methyl-5-nitro-1-(1-piperidinyl)-3-(1-piperidinylmethyl)- (9CI) (CA INDEX NAME)



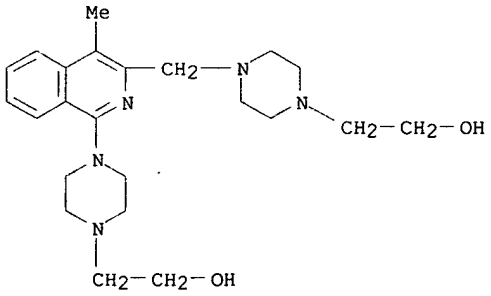
RN 14657-51-3 HCAPLUS
CN 5-Isoquinolinamine, 4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)- (9CI) (CA INDEX NAME)



RN 14657-52-4 HCAPLUS
CN Isoquinoline, 5-chloro-4-methyl-1-(4-morpholinyl)-3-(4-morpholinylmethyl)-
(9CI) (CA INDEX NAME)



RN 14825-52-6 HCAPLUS
CN 1-Piperazineethanol, 4,4'-{methylene(4-methyl-3,1-isoquinolinediyl)}di-,
hydrochloride (8CI) (CA INDEX NAME)



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